

REQUEST FOR PROPOSAL CITY OF NAPLES PURCHASING DIVISION CITY HALL, 735 8TH STREET SOUTH **NAPLES, FL 34102** PH: 239-213-7100 FX: 239-213-7105

COVER SHEET

NOTIFICATION DATE: 03/05/2024	Naples Pier Reconstruct	ion - ITB	solicitation NUMBER: 24-011	OPENING DATE & TIME: 05/07/2024 2:00 PM
A non-i	PRE-BID CONFERENCE DATE, TIME AND LOCATION: A non-mandatory Pre-bid conference will be held March 18th 2024, at 10:00 A.M. local time in the Council Chambers located at 735 8th St. South, Naples FL, 34102			
TEN CALENDAR	Questions regarding this proposer packet must be received in writing in the Purchasing Division NO LATER THAN TEN CALENDAR DAYS PRIOR TO THE BID OPENING DATE TO ENSURE AN ANSWER IS PROVIDED PRIOR TO CLOSING. Last day for questions is 04/27/2024. Direct all questions to: Felix Gomez, CPPB, NIGP-CPP Procurement and Contracts Manager City of Naples, Purchasing Division 735 8th Street South Naples, Florida 34102 PH: (239) 213-7101 FX: (239) 213-7105 fgomez@naplesgov.com			
MAILING ADDRESS:	MAILING ADDRESS:			
CITY-STATE-ZIP:	CITY-STATE-ZIP:			
PH:		EMAIL:		
FX:		WEB ADDRESS	:	
AUTHORIZED SIGNATUR	E DATE	PRINTED NAME/	TITLE	
I certify that this bid is made without prior understanding, agreement, or connection with any corporation, firm, or person submitting a bid for the same materials, supplies, or equipment and is in all respects fair and without collusion or fraud. I agree to abide by all conditions of this bid and certify that I am authorized to sign this bid for the bidder. In submitting a bid to the City of Naples the bidder offers and agrees that if the bid is accepted, the bidder will convey, sell, assign or transfer to the City of Naples all rights, title, and interest in and to all causes of action it may now or hereafter acquire under the Anti-trust laws of the United States and the State of FL for price fixing relating to the particular commodities or services purchased or acquired by the City of Naples. At the City's discretion, such assignment shall be made and become effective at the time the City tenders final payment to the bidder.				
FEI/EIN Nu	imber			
Addendum #1	Please initial by all that apply, I acknowledg		of the following adder endum #3	ndum Addendum #4
Addendum #5	Addendum #6	Add	endum #7	Addendum #8

PLEASE NOTE THE FOLLOWING

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- This page <u>must be completed and returned</u> with your bid. Bids must be <u>submitted in a sealed envelope</u>, <u>marked with solicitation number & opening date</u>. All submissions must be received, and date stamped by Purchasing staff prior to the above "<u>OPENING DATE & TIME</u>". Submission received after the above opening date and time will not be accepted. >
- >
- Bid tabulations will be available on the City of Naples web site https://www.naplesgov.com/rfps >

GENERAL CONDITIONS

TO ENSURE ACCEPTANCE OF THE PROPOSAL, PLEASE FOLLOW THESE INSTRUCTIONS. ANY AND ALL SPECIAL CONDITIONS, ATTACHED HERETO, HAVE PRECEDENCE.

- SEALED PROPOSAL: All proposals must be submitted in a sealed envelope. The face of the envelope shall contain the proposal name and proposal number. Proposals not submitted on attached proposal form shall be rejected. All proposals are subject to the conditions specified herein. Those which do not comply with these conditions are subject to rejection.
- 2. DEFINITIONS: Uses of the following terms are interchangeable as referenced: "vendor, contractor, supplier, proposer, company, parties, persons", "purchase order, PO, contract, agreement", "city, City of Naples, Naples, agency, owner, requestor, parties", "bid, proposal, response, quote".
- **3. BID EXPENSES:** Bidders shall bear all costs and expenses incurred in developing, preparing, and submitting bids.
- 4. EXECUTION OF PROPOSAL: Proposal must contain a manual signature of authorized representative in the proposal section. Proposal must be typed or printed in ink. Use of erasable ink is not permitted. All corrections made by proposer to his proposal must be initialed.
- **5. BID FORMATTING:** Vendor should type or electronically enter the information onto its bid submittal to prevent errors in the evaluation. Failure to type or electronically enter the information may result in bid disqualification.
- 6. NO PROPOSAL: If not submitting a proposal, respond by returning the Statement of No Proposal and explain the reason in the spaces provided. Failure to respond 3 times in succession without justification shall be cause for removal of the supplier's name from the proposal mailing list. NOTE: To qualify as a respondent, proposer must submit a "NO PROPOSAL," and it must be received no later than the stated proposal opening date and hour.
- 7. PROPOSAL OPENING: Shall be public, on the date and at the time specified on the proposal form. It is the proposer's responsibility to assure that his proposal is delivered at the proper time and place of the proposal opening. Proposals which for any reason are not so delivered will not be considered. Offers by telegram; telephone; or fax are not acceptable. Proposal files may be examined during normal working hours.
- 8. WITHDRAWAL OF PROPOSALS: Withdrawal of a proposal within sixty (60) days after the opening of proposals is subject to suspension or debarment in accordance with Section 2-668(2) of the City Code.
- **9. PRICES, TERMS and PAYMENT:** Prices shall be proposed if required by this request for proposal and include all packing, handling, shipping charges and delivery

to the destination shown herein. Proposer is encouraged to offer cash discount for prompt invoice payment. Terms of less than 20 days will not be considered.

- A. TAXES: The City of Naples does not pay Federal Excise and Sales taxes on direct purchases of tangible personal property. See exemption number on face of purchase order. This exemption does not apply to purchases of tangible personal property made by contractors who use the tangible personal property in the performance of contracts for the improvement of City- owned real property.
- **B. MISTAKES:** Proposers are expected to examine the specifications, delivery schedule, proposal prices, extensions, and all instructions pertaining to supplies and services. Failure to do so will be at proposer's risk. In case of mistake in extension, the unit price will govern.
- c. CONDITION AND PACKAGING: It is understood and agreed that any item offered or shipped as a result of this proposal shall be a new, current standard production model available at the time of this proposal. All containers shall be suitable for storage or shipment, and all prices shall include standard commercial packaging.
- D. SAFETY STANDARDS: Unless otherwise stipulated in the proposal, all manufactured items and fabricated assemblies shall comply with applicable requirements of Occupational Safety and Health Act and any standards there under.
- E. UNDERWRITERS' LABORATORIES: Unless otherwise stipulated in the proposal, all manufactured items and fabricated assemblies shall carry U.L. approval and re-examination listing where such has been established.
- **F. PAYMENT:** Payment will be made by the buyer after the items awarded to a vendor have been received, inspected, and found to comply with award specifications, free of damage or defect and properly invoiced. All invoices shall bear the purchase order number. Payment for partial shipments shall not be made unless specified in the proposal. Failure to follow these instructions may result in delay in processing invoices for payment. In addition, the purchase order number must appear on bills of lading, packages, cases, delivery lists and correspondence.
- **G. CREDIT CARD PAYMENT:** The City of Naples may, at its discretion, use VISA/MASTER card credit network as a payment vehicle for goods and services purchased as a part of this contract. The City of Naples will not accept any additional surcharges (credit card transaction fees) as a result of using the City's credit card for transactions relating to this solicitation.
- **10. DELIVERY:** Unless actual date of delivery is specified (or if specified delivery cannot be met), show number of days required to make delivery after receipt of purchase order in space provided. Delivery time may become a basis for making an award (see Special Conditions). Delivery shall be within the normal working hours of the user, Monday through Friday, unless otherwise specified. Unless otherwise specified, all prices are to be FOB-Destination.
- **11. MANUFACTURERS' NAMES AND APPROVED EQUIVALENTS:** Any manufacturers' names, trade names, brand names, information and/or catalog

numbers listed in a specification are for information and not intended to limit competition. The proposer may offer any brand for which he is an authorized representative, which meets or exceeds the specification for any item(s). If proposals are based on equivalent products, indicate on the proposal form the manufacturer's name and number. Proposer shall submit with his proposal, cuts, sketches, and descriptive literature, and/or complete specifications. Reference to literature submitted with a previous proposal will not satisfy this provision. The proposer shall also explain in detail the reason(s) why the proposed equivalent will meet the specifications and not be considered an exception thereto. Proposals which do not comply with these requirements are subject to rejection. Proposals lacking any written indication of intent to quote an alternate brand will be received and considered in complete compliance with the specifications as listed on the proposal form.

- **12. SPECIAL CONDITIONS:** The Purchasing Department has the authority to issue Special Conditions as required for any solicitation. Any Special Conditions that vary from these General Conditions will take precedence over the General Conditions. The special additions are supplemental and in addition to the General Conditions. To the extent that there is a conflict between the General Conditions and the Special Conditions, the Special Conditions will apply and control to the extent of the conflict.
- 13. ADDENDA AND INTERPRETATIONS: No interpretations of the meaning of the plans, specifications or other contract documents will be made orally to any bidder. Prospective bidders must request from the Purchasing and Contracts Manager such interpretation in writing. To be considered, such request must be received 10 calendar days prior to the bid opening. Request must reference the date of bid opening, bid title, and bid number. Failure to comply with this condition will result in bidders waiving their rights to dispute the proposal. Any and all interpretations and any supplemental instructions will be in the form of a written addenda which, if issued, will be posted on the City website and DemandStar.com not later than (3) days prior for the opening of bids. Failure of any bidder to receive any such addenda or interpretation shall not relieve any bidder from any obligation under their bid as submitted. All addenda so issued shall become a part of the contract document.
- 14. CONFLICT OF INTEREST: All proposal awards are subject to Section 2-72 Conflict of Interest, City of Naples Code of Ordinances, which states: "No public officer or employee shall have or hold any employment or contractual relationship with any business entity or any agency which is subject to the regulation of or is doing business with the city; nor shall an officer or employee have or hold any employment or contractual relationship that will create a continuing or frequently recurring conflict between his private interests and the performance of his public duties or that would impede the full and faithful discharge of his public duties. Any member of the city council or any city officer or employee who willfully violates this section shall be guilty of malfeasance in office or position and shall forfeit his office or position. Violation of this section with the knowledge, express or implied, of the person or corporation contracting with or making a sale to the city shall render the contract or sale voidable by the city manager or the city council.".
- 15. CONE OF SILENCE: "Cone of Silence" means a prohibition on any

communication regarding a particular Request for Proposals (RFP), Request for Qualifications (RFQ), Invitation to Bid (ITB), or other competitive solicitation between:

Any person who seeks an award therefrom, including a potential vendor or vendor's representative, and

The City Council, City Attorney, and all City employees, and any nonemployee appointed to evaluate or recommend selection in such procurement process.

The Cone of Silence shall not apply to communications with the Procurement Official to obtain clarification or information concerning the subject solicitation. Any such contact other than the Procurement Official may be considered grounds for disqualification. The City shall not be responsible for oral interpretations given by any City employee or its representative. For purposes of this section, "vendor's representative" means an employee, partner, director, or officer of a potential vendor, or consultant, lobbyist, or actual or potential subcontractor or subconsultant of a vendor, or any other individual acting through or on behalf of any person seeking an award.

- 16. ETHICS REQUIREMENT: As required by Section 2-975(h)(3), except as otherwise prohibited by law, all contracts executed between the City and a vendor shall 1) prohibit the vendor from employing, or offering to employ any compensated public official or city employee who is substantially involved with the regulation, oversight or management of the contract or the transaction of business during the term, and for a period of two years after termination, of the contract; and 2) provide for liquidated damages in favor of the City for violation of this subsection in the amount equal to the greater of: (i) the compensation received by the compensated public official or city employee from the vendor; and (ii) the amount equal to the total of the compensated public official's or City employee's last two years of gross compensation from the City.
- **17. E-VERIFY REQUIREMENT:** All contracts between the vendor and the City shall require the vendor to be obligated to comply with the provisions of Section 448.095, Florida Statutes (2023) "Employment Eligibility," as amended from time to time. This includes, but is not limited to, registration and use of the E-Verify System to verify the work authorization status of all newly hired employees and requiring any and all subcontractors to provide an affidavit to vendor attesting that the subcontractor does not employ, contract with, or subcontract with, an unauthorized alien. The vendor shall require any subcontractor to insert into any subcontracts the requirements of this section and shall be responsible for insuring compliance by all subcontractors. The Vendor shall agree to maintain a copy of such affidavit for the duration of the Agreement. Failure to comply will result in the termination of the Agreement as provided in Section 448.095, Florida Stat. (2023), as amended; and the vendor will not be awarded a public contract for at least one (1) year after the date on which the contract was terminate. Vendor will also be

liable for any additional costs to City incurred because of the termination of the contractor.

The City shall upon a good faith belief that a vendor or its subcontractor has knowingly violated Section 448.09(1), Florida Statutes or the provisions of Section 448.095, Florida Statutes, terminate the contract, which shall not be considered a breach of contract and may be challenged pursuant to Section 448.095(2)(d), Florida Statutes. Vendor acknowledges that upon termination of the contract by the City for a violation of this Section, the vendor may not be awarded a public contract for at least one (1) year and that the Vendor is liable for any additional costs incurred by the City as a result of the termination. Vendor shall provide an affidavit of compliance with the E-Verify Requirement at the time a contract is executed.

- **18. AWARDS:** As the best interest of the City may require, the right is reserved to make award(s) by individual item, group of items, all or none, divide the award or a combination thereof; to reject any and all proposals or waive any minor irregularity or technicality in proposals received.
- **19. ADDITIONAL QUANTITIES:** For a period not exceeding ninety (90) days from the date of acceptance of this offer by the buyer, the right is reserved to acquire additional quantities up to but not exceeding those shown on proposal at the prices proposal in this invitation. If additional quantities are not acceptable, the proposal sheets must be noted "PROPOSAL IS FOR SPECIFIED QUANTITY ONLY." (THIS PARAGRAPH DOES NOT APPLY FOR A TERM CONTRACT.)
- **20. SERVICE AND WARRANTY:** Unless otherwise specified, the proposer shall define any warranty service and replacements that will be provided during and subsequent to this contract. Proposers must explain on an attached sheet to what extent warranty and service facilities are provided.

The City of Naples will not accept any disclaimer of the warranties of merchantability and fitness for a particular purpose for the products offered. Proposals will clearly state any additional warranties and guarantees against defective materials and workmanship. A copy of the complete manufacturer's warranty statement is to be submitted with the proposal.

- **21. SAMPLES:** Samples of items, when called for, must be furnished free of expense, and if not destroyed, may upon request, be returned at the proposer's expense. Each individual sample must be labeled with proposer's name, manufacturer's brand name and number, proposal number and item reference. Request for return of samples shall be accompanied by instructions which include shipping authorization and name of carrier and must be received with your proposal. If instructions are not received within this time, the commodities shall be disposed of by the City of Naples.
- 22. PROPOSAL PROTESTS: The City of Naples has formal protest procedures that

are available upon request.

- **23. INSPECTION, ACCEPTANCE AND TITLE:** Inspection and acceptance will be at destination unless otherwise provided. Title and risk of loss or damage to all items shall be the responsibility of the contract supplier until accepted by the ordering agency, unless loss or damage results from negligence by the ordering.
- **24. DISPUTES:** In case of any doubt or difference of opinion as to the items to be furnished hereunder, the decision of the buyer shall be final and binding on both parties.
- **25. GOVERNMENTAL RESTRICTIONS:** In the event any governmental restrictions may be imposed which would necessitate alteration of the material, quality, workmanship or performance of the items offered on this proposal prior to their delivery, it shall be the responsibility of the successful proposer to notify the buyer at once, indicating in his letter the specific regulation which required an alteration. The City reserves the right to accept any such alteration, including any price adjustments occasioned thereby, or to cancel the contract at no expense to the City.
- **26. LEGAL REQUIREMENTS:** Applicable provision of all Federal, State, county and local laws, and of all ordinances, rules, and regulations shall govern development submittal and evaluation of all proposals received in response hereto and shall govern any and all claims and disputes which may arise between person(s) submitting a proposal response hereto and the City of Naples by and through its officers, employees and authorized representatives, or any other person, natural or otherwise; and lack of knowledge by any proposer shall not constitute a cognizable defense against the legal effect thereof.
- 27. PATENTS AND ROYALTIES: The proposer, without exception, shall indemnify and save harmless the City of Naples and its employees from liability of any nature or kind, including cost and expenses for or on account of any copyrighted, patented, or unpatented invention, process, or article manufactured or used in the performance of the contract, including its use by the City of Naples. If the proposer uses any design, device, or materials covered by letters, patent or copyright, it is mutually agreed and understood without exception that the proposal prices shall include all royalties or cost arising from the use of such design, device, or materials in any way involved in the work.
- **28. ADVERTISING:** In submitting a proposal, proposer agrees not to use the results there from as a part of any commercial advertising.
- **29. ASSIGNMENT:** Any Purchase Order issued pursuant to this proposal invitation and the monies which may become due hereunder are not assignable except with the prior written approval of the buyer.
- **30. LIABILITY:** The supplier shall hold and save the City of Naples, its officers, agents, and employees harmless from liability of any kind in the performance of

this contract.

- **31. PUBLIC ENTITY CRIMES:** A person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a proposal on a contract to provide any goods or services to a public entity, may not submit a proposal on a contract with a public entity for the construction or repair of a public building or public work, may not submit proposals on leases of real property to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity in excess of the threshold amount provided in Section 287.017, for CATEGORY TWO for a period of 36 months from the date of being placed on the convicted vendorlist.
- **32. DISCRIMINATION:** Pursuant to Subsection 287.134(2)(a), F.S., "an entity or affiliate who has been placed on the discriminatory vendor list may not submit a bid, proposal or reply on a contract to provide any goods or services to a public entity; may not submit a bid, proposal, or reply on a contract with a public entity for the construction or repair of a public building or public work; may not submit bids, proposals or replies on leases of real property to a public entity; may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity; and may not transact business with any public entity".
- **33. COUNTY TAXES:** No proposal shall be accepted from and no contract will be awarded to any person, firm or corporation that is in arrears to the government of Collier County, Florida.
- **34. OFFER EXTENDED TO OTHER GOVERNMENTAL ENTITIES:** The City of Naples encourages and agrees to the successful proposer/proposer extending the pricing, terms and conditions of this solicitation or resultant contract to other governmental entities at the discretion of the successful proposer/proposer.

IF THIS PROPOSAL IS FOR A TERM CONTRACT, THE FOLLOWINGCONDITIONS SHALL ALSO APPLY

- **35. ELIGIBLE USERS:** All departments of the City of Naples are eligible to use this term contract. Such purchases shall be exempt from the competitive proposal requirements otherwise applying to their purchases.
- **36. PRICE ADJUSTMENTS:** Any price decrease effectuated during the contract period by reason of market change shall be passed on to City of Naples. Price increases are not acceptable.
- **37. CANCELLATION:** All contract obligations shall prevail for at least one hundred eighty (180) days after effective date of contract. After that period, for the protection of both parties, this contract may be cancelled in whole or in part by either party by giving thirty (30) days prior written notice to the other party.

38. RENEWAL: Contract will be in-place for a three (3) year term with an optional two

(2) one (1) year renewals, if mutually agreed upon by the CITY and CONTRACTOR. Pursuant to the City of Naples Code of Ordinances, Sec.2-667(7)(e), the term of this contract may be extended by the parties for no more than two years. Each renewal or extension shall be automatically extended for automatic and successive additional terms, unless either party gives written notice to

the other not fewer than ninety (90) days prior to the expiration of the then current term. It is recognized that the terms "renewal" and "extension" once had a distinct meaning in the law; however, the intent of this section is that no contract whether continued by a renewal, extension, or a combination of the two, will result in a term of more than three years plus two years, for a total of five years maximum without City Council approval.

- **39. ABNORMAL QUANTITIES:** While it is not anticipated, should any unusual or abnormal requirements arise, the City reserves the right to solicit separate proposals thereon.
- **40. FISCAL NON-FUNDING CLAUSE:** In the event sufficient funds are not budgeted for a new fiscal period, the City shall notify the contractor of such occurrence and the contract shall terminate on the last day of the current fiscal year without penalty or expense to the City.

IF THIS PROPOSAL IS FOR PERFORMING A SERVICE, THE FOLLOWING CONDITIONS SHALL ALSO APPLY

- **41. ALTERNATIVE PROPOSALS:** Proposers offering service delivery methods other than those permitted by the scope of work may submit a separate envelope clearly marked "ALTERNATIVE PROPOSAL". Alternative proposals will be deemed non- responsive and will not be considered for award. All such responses will, however, be examined prior to award. Such examination may result in cancellation of all proposals received to permit rewriting the scope of work to include the alternative method, or the alternative method may be considered for future requirements of the City of Naples.
- **42. ANTITRUST:** By entering into a contract, the contractor conveys, sells, assigns and transfers to the City of Naples all rights, titles and interest it may now have or hereafter acquire under the antitrust laws of the United States and the State of Florida that relate to the particular goods or services purchased or acquired by the City of Naples under said contract.
- **43. PROPOSER INVESTIGATIONS:** Before submitting a proposal, each proposer shall make all investigations and examinations necessary to ascertain all site conditions and requirements affecting the full performance of the contract and

to verify any representations made by the City of Naples upon which the proposer will rely. If the proposer receives an award as a result of its proposal submission, failure to have made such investigations and examinations will in no way relieve the proposer from its obligation to comply in every detail with all provisions and requirements of the contract documents, nor will a plea of ignorance of such conditions and requirements be accepted as a basis for any claim whatsoever by the contractor for additional compensation.

- **44. CERTIFICATES AND LICENSES:** The Contractor, at time of proposal, shall possess the correct occupational licenses, all professional licenses or other authorizations necessary to carry out and perform the work required by the City of Naples and Collier County for this project pursuant to all applicable Federal, State and Local Laws, Statues, Ordinances, and rules and regulations of any kind.
- **45. CHANGE IN SCOPE OF WORK:** The City of Naples may order changes in the work consisting of additions, deletions or other revisions within the general scope of the contract. No claims may be made by the contractor that the scope of the project or of the contractor's services has been changed, requiring changes to the amount of compensation to the contractor or other adjustments to the contract unless such changes or adjustments have been made by written amendment to the contract signed by the City of Naples and the contractor. If the contractor believes that any particular work is not within the scope of the project, is a material change, or will otherwise require more compensation to the contractor, the contractor must immediately notify the City in writing of this belief. If the City believes that the particular work is within the scope of the contract as written, the contractor will be ordered to and shall continue with the work as changed and at the cost stated for the work within the scope.
- **46. CHANGE ORDERS:** The City may, by field directive, authorize minor variations from the requirements of the contract documents, which do not involve an adjustment in the contract price or the contract time and are consistent with the overall intent of the contract documents. Supplemental agreements, in the form of "change orders" shall be used to clarify the plans and specifications, to provide for unforeseen work or alterations in plans, to change the limits of construction to meet field conditions, to provide a safe and functional connection to an existing facility, to make the project functionally operational in accordance with the intent of the original contract, or to adjust the contract price or the contract time requirements. The City of Naples will not pay more than a total of 10% on markup and overhead. Any supplemental agreement shall be approved by the City Manager, contractor and the architect/engineer, if applicable, prior to the commencement of the modified work. The City Manager may only approve contract change orders not exceeding 25 percent of the original contract that were originally approved by City Council. Contracts originally approved at \$50,000.00 or less will be limited to an amount that does not exceed \$75,000.00 for a change order or modification. (City Code Sec.2- 667.(7)(a)(b).

The City reserves the right to make, at any time prior to or during the progress of the work, increases or decreases in the quantities of work as may be found necessary or desirable by the City. Compensation for changes in quantities shall be at the bid unit price for the specific item of work with no additional charges allowed for the change in quantity.

All unit prices for items of work in the original contract shall be considered allinclusive of expenses necessary to accomplish the work regardless of the unit of measure (e.g. LS, LF, CY, SY, TN, etc.) including but not limited to:

- 1. Material
- 2. Delivery
- 3. Direct Labor
- 4. Taxes
- 5. Rental rates
- 6. Fringe Benefits
- 7. Overhead
- 8. Profit
- 9. Markup

A change in quantities whether greater than or lower than the original bid quantity shall be treated as if the new quantity was part of the original quantity of work with respect to unit value. Upon approval of changed quantities the quantities shall be adjusted on the schedule of values to reflect the new total quantity of each item of work. Each proposal for change order shall list both the reduction in quantity of deleted work and increased quantity of added work. The City of Naples will not pay more than a total of 10% on markup and overhead when establishing a negotiated fee for items not listed by unit price.

- **47. AWARDED CONTRACT:** An awarded contract with hourly rates will determine any overtime that is authorized by the City and its Project Manager. Any authorized overtime rates will be based on the standard 1.5 time the indicated hourly rate. This multiplier will be used on any overtime hours being charged that have been mutually agreed upon by the CITY and CONTRACTOR.
- **48. RATE ADJUSTMENTS:** Rate Adjustments: Any adjustment to an awarded agreement that contains equipment and labor rates in the agreement shall be made in one or more of the following ways:
 - 1. By agreement on a fixed price adjustment before commencement of the pertinent performance or as soon thereafter as practicable;
 - 2. By unit prices specified in the Contract or subsequently agreed upon;
 - 3. By the costs attributable to the event or situation covered by the provision, plus appropriate profit or fee, all as specified in the Contract or subsequently agreed upon;
 - 4. In such other manner as the parties may mutually agree; or
 - 5. In the absence of agreement between the parties, by a unilateral

determination by the Agency procurement officer of the costs attributable to the event or situation covered by the provision, plus appropriate profit or fee, all as computed by the Agency procurement officer in accordance with generally accepted accounting principles.

- **49. CONTRACTOR PERSONNEL:** The City of Naples shall, throughout the life of the contract, have the right of reasonable rejection and approval of staff or subcontractors assigned to the work by the contractor. If the City reasonably rejects staff or subcontractors, the contractor must provide replacement staff or subcontractors satisfactory to the City in a timely manner and at no additional cost to the City. The day- to-day supervision and control of the contractor's employees and sub- contractors is the responsibility solely of the contractor.
- **50. COST REIMBURSEMENT:** The contractor agrees that all incidental costs, including allowances for profit and tools of the trade, must be included in the proposal rates. If an arrangement is made between the contractor and the City to reimburse the contractor for the cost of materials provided in the performance of the work, the contractor shall be reimbursed in the following manner: The City shall reimburse the contractor on completion and acceptance of each assigned job, only for those materials actually used in the performance of the work that is supported by invoices issued by the suppliers of the contractor describing the quantity and cost of the materials purchased. No surcharge shall be added to the supplier's invoices or included in the contractor's invoice submitted to the City that would increase the dollar amount indicated on the supplier's invoice for the materials purchased job.
- **51. EXCEPTIONS:** Proposers taking exception to any part or section of the solicitation shall indicate such exceptions on the proposal form. Failure to indicate any exception will be interpreted as the proposer's intent to comply fully with the requirements as written. Conditional or qualified proposals, unless specifically allowed, shall be subject to rejection in whole or in part.
- **52. FAILURE TO DELIVER:** In the event of the contractor to fail to deliver services in accordance with the contract terms and conditions, the City, after due oral or written notice, may procure the services from other sources and hold the contractor responsible for any resulting purchase and administrative costs. This remedy shall be in addition to any other remedies that the City may have.
- **53. FAILURE TO ENFORCE:** Failure by the City at any time to enforce the provisions of the contract shall not be construed as a waiver of any such provisions. Such failure to enforce shall not affect the validity of the contract or any part thereof or the right of the City to enforce any provision at any time in accordance with its terms.
- 54. FORCE MAJEURE: The contractor shall not be held responsible for failure to

perform the duties and responsibilities imposed by the contract due to legal strikes, fires, riots, rebellions and acts of God beyond the control of the contractor, unless otherwise specified in the contract.

- **55. INDEPENDENT CONTRACTOR:** The contractor shall be legally considered an independent contractor and neither the contractor nor its employees shall, under any circumstances, be considered servants or agents of the City of Naples and the City of Naples shall be at no time legally responsible for any negligence or any wrongdoing by the contractor, its servants or agents. The City of Naples shall not withhold from the contract payments to the contractor any federal income taxes, Social Security tax, or any other amounts for benefits to the contractor. Further, the City shall not provide to the contractor any insurance coverage or other benefits, including Workers' Compensation normally provided by the City for its employees.
- **56.ORAL STATEMENTS:** No oral statement of any person shall modify or otherwise affect the terms, conditions or specifications stated in this contract. All modifications to the contract must be made in writing by the City of Naples.
- **57. QUALIFICATIONS OF PROPOSERS:** The proposer may be required, before the award of any contract, to show to the complete satisfaction of the City of Naples that it has the necessary facilities, ability, and financial resources to provide the service specified therein in a satisfactory manner. The proposer may also be required to give a past history and references in order to satisfy the City in regard to the proposer's qualifications. The City may make reasonable investigations deemed necessary and proper to determine the ability of the proposer to perform the work, and the proposer shall furnish to the City all information for this purpose that may be requested. The

City reserves the right to reject any proposal if the evidence submitted by, or investigation of, the proposer fails to satisfy the City that the proposer is properly qualified to carry out the obligations of the contract and to complete the work described therein. Evaluation of the proposer's qualifications shall include:

- > The ability, capacity, skill and financial resources to perform the work or service.
- > The ability to perform the work service promptly or within the time specified, without delay.
- > The character, integrity, reputation, judgment, experience, and efficiency of the proposer.
- > The quality of performance of previous contracts or services.
- **58. QUALITY CONTROL:** The contractor shall institute and maintain throughout the contract period a properly documented quality control program designed to ensure that the services are provided at all times and in all respects in accordance with the contract. The program shall include providing daily supervision and conducting frequent inspections of the contractor's staff and ensuring that accurate records are maintained describing the disposition of all complaints. The records so created shall be open to inspection by the City.

- **59. RESPONSIBLE VENDOR DETERMINATION:** Respondent is hereby notified that Section 287.05701, Florida Statutes, requires that the City may not request documentation of or consider a vendor's social, political, or ideological interests when determining if the vendor is a responsible vendor.
- **60. RECOVERY OF MONEY:** Whenever, under the contract, any sum of money shall be recoverable from or payable by the contractor to the City, the same amount may be deducted from any sum due to the contractor under the contract or under any other contract between the contractor and the City. The rights of the City are in addition and without prejudice to any other right the City may have to claim the amount of any loss or damage suffered by the City on account of the acts or omissions of the contractor.
- **61. REQUIREMENTS CONTRACT:** During the period of the contract, the contractor shall provide all the services described in the contract. The contractor understands and agrees that this is a requirements contract and that the City shall have no obligation to the contractor if no services are required. Any quantities that are included in the scope of work reflect the current expectations of the City for the period of the contract. The amount is only an estimate and the contractor understands and agrees that the City is under no obligation to the contractor to buy any amount of services as a result of having provided this estimate or of having any typical or measurable requirement in the past. The contractor further understands and agrees that the City may require services in excess of the estimated annual contract amount and that the quantity actually used whether in excess of, or less than, the estimated annual contract amount and that the quantity actually used.
- **62. TERMINATION FOR CONVENIENCE:** The performance of work under the contract may be terminated by the City in whole or in part whenever the City determines that termination is in the City's best interest. Any such termination shall be effected by the delivery to the contractor of a written notice of termination of at least seven (7) days before the date of termination, specifying the extent to which performance of the work under the contract is terminated and the date upon which such termination becomes effective. After receipt of a notice of termination, except as otherwise directed, the contractor shall stop work on the date of the receipt of the notice or other date specified in the notice; place no further orders or subcontracts for materials,

services or facilities except as necessary for completion of such portion of the work not terminated; terminate all vendors and subcontracts; and settle all outstanding liabilities and claims.

63. TERMINATION FOR DEFAULT: The City of Naples reserves the right to terminate the contract if the City determines that the contractor has failed to perform satisfactorily the work required, as determined by the City. In the event the City decides to terminate the contract for failure to perform satisfactorily, the City shall give to the contractor at least seven (7) days written notice before the

termination takes effect. The seven-day period will begin upon the mailing of notice by the City. If the contractor fails to cure the default within the seven (7) days specified in the notice and the contract is terminated for failure to perform satisfactorily, the contractor shall be entitled to receive compensation for all reasonable, allocable and allowable contract services satisfactorily performed by the contractor up to the date of termination that were accepted by the City prior to the termination. In the event the City terminates the contract because of the default of the contractor, the contractor shall be liable for all excess costs that the City is required to expend to complete the work under contract.

- **64. STATE AND FEDERAL EMPLOYMENT LAWS:** Contractors providing service to the City are required to comply with all state and federal employment laws. This includes, but is not limited to, laws resulting from the Immigration and Reform and Control Act of 1986, wherein all employers are required to verify the identity and employment eligibility of all employees. The Department of Homeland Security, U.S. Citizenship and Immigration Services require employees and employers to complete Form I-9 and the employer must examine evidence of identity and employment eligibility within three business days of the date employment begins. Non-compliant contractors will be subject to contract sanctions, up to and including contract termination.
- 65. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY, AND VOLUNTARY EXCLUSION: "Debarment and Suspension" and 2 CFR 180 "OMB Guidelines to Agencies on Government wide Debarment and Suspension." These rules require all contractors using federal funds not be debarred or suspended from doing business with the Federal Government. This includes sub- recipients and lower tier participant for covered transactions. Signing and submitting this document certified the organization and its principals are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any federal department or agency, and further have not within the preceding three-year period been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction.
- 66.119.0701 F.S. CONTACT INFORMATION FOR CITY OF NAPLES' CUSTODIAN OF PUBLIC RECORDS, CITY CLERK'S OFFICE: If the CONTRACTOR has questions regarding the application of Chapter 119, Florida Statutes, to the CONTRACTOR'S duty to provide public records relating to this contract, contact the City of Naples' Custodian of Public records, the City Clerk at Telephone: 239-213- 1015; Email: PublicRecordsReguest@naplesgov.com; Address: 735 8th Street S.,

Naples, Florida 34102; Mailing address: same as street address.

67.FLORIDA PUBLIC RECORDS LAW: In accordance with Chapter 119, Florida Statutes, and, except as may be provided by other applicable State and

Federal laws, all Proposers should be aware that sealed bids, proposals, or replies received by the City pursuant to a competitive solicitation thereto are in the public domain and are available for public inspection, review and copying. The Proposers are requested, however, to identify specifically any information contained in their bids/proposals which they consider confidential and/or proprietary, inclusive of trade secrets as defined in s. 812.081, Florida Statutes, and which they believe to be exempt from disclosure, citing specifically the applicable exempting law. All proposals received in response to any invitation to bid, request for proposals, or request for qualifications, will become the property of the City of Naples and will not be returned. In the event of an award, all documentation produced as part of the contract will become the exclusive property of the City. All materials that qualify for exemption from Chapter 119, Florida Statutes or other applicable law must be submitted in a separate envelope, clearly identified as "EXEMPT FROM PUBLIC DISCLOSURE" with your firm's name and the proposal number marked on the outside. The City will not accept bids/proposals when the entire proposal is labeled as exempt from public disclosure.

If the contractor, vendor, firm, or proposer considers any portion of any documents, data, or records submitted to the City to be a confidential, proprietary, trade secret or otherwise not subject to disclosure pursuant to Chapter 119, Florida Statutes, the Florida Constitution or other authority, the contractor, vendor, firm, or proposer must simultaneously provide the City Department with a separate redacted copy of the information it claims as Confidential and briefly describe in writing the grounds for claiming exemption from the public records law, including the specific statutory citation for such exemption. This redacted copy shall contain the Contract name and number and shall be clearly titled "Confidential." The redacted copy should only redact those portions of material that the Contractor claims is confidential, proprietary, trade secret or otherwise not subject to disclosure. If contractor, vendor, firm, or proposer fails to submit a redacted copy of documents, data, or other records it claims is confidential, the City is authorized to produce all documents, data, and other records submitted to the City in answer to a public records request for these records.

Be aware that the designation of an item as exempt from public disclosure by a Proposer may be challenged in court by any person or entity. By designation of material in your proposal as exempt from public disclosure, Proposer agrees to defend the City of Naples (and its employees, agents and elected and appointed officials) against all claims and actions (whether or not a lawsuit is commenced) related to Proposer's designation of material as exempt from public disclosure and to hold harmless the City of Naples (and its employees, agents and elected and appointed officials) for any award to a plaintiff for damages, costs and attorneys' fees, and for costs and attorneys' fees incurred by the City by reason of any claim or action related to you designation of material as exempt from public disclosure.

Note: Proposer's References and Proposal Cost or Price will be deemed

a public record, and if a claim of confidentiality is made, the City may deem the proposal non-responsive.

In accordance with Chapter 119.071(1)(b)2. of the Florida Statutes, sealed bids, proposals, or replies received by an agency pursuant to a competitive solicitation are exempt from s. 119.07(1) and s. 24(a), Art. I of the State Constitution until such time as the agency provides notice of an intended decision or until 30 days after opening the bids, proposals, or final replies, whichever is earlier.

In accordance with Chapter 119.071(1)(c)3. of the Florida Statutes, if an agency rejects all bids, proposals, or replies submitted in response to a competitive solicitation and the agency concurrently provides notice of its intent to reissue the competitive solicitation, the rejected bids, proposals, or replies remain exempt from s. 119.07(1) and s. 24(a), Art. I of the State Constitution until such time as the agency provides notice of an intended decision concerning the reissued competitive solicitation or until the agency withdraws the reissued competitive solicitation. A bid, proposal, or reply is not exempt for longer than 12 months after the initial agency notice rejecting all bids, proposals, or replies.

In accordance with Chapter 286.0113(2)(c)3. of the Florida Statutes, if the agency rejects all bids, proposals, or replies and concurrently provides notice of its intent to reissue a competitive solicitation, the recording and any records presented at the exempt meeting remain exempt from s. 119.07(1)and

s. 24(a), Art. I of the State Constitution until such time as the agency provides notice of an intended decision concerning the reissued competitive solicitation or until the agency withdraws the reissued competitive solicitation. A recording and any records presented at an exempt meeting are not exempt for longer than 12 months after the initial agency notice rejecting all bids, proposals, or replies.

68. EQUAL EMPLOYMENT OPPORTUNITY CLAUSE: City of Naples, in accordance with the provisions of Title VII of the Civil Rights Act of 1964 (78 Stat. 252) and the Regulations of the Department of Commerce (15 CFR, Part 8) issued pursuant to such Act, hereby notifies all Proposers that it will ensure that in any contract entered into pursuant to this advertisement, minority business enterprises will be afforded full opportunity to submit proposals in response to this advertisement and will not be discriminated against on the ground of race, color or national origin in consideration for an award.

THE CITY OF NAPLES IS AN EQUAL OPPORTUNITY EMPLOYER

GENERAL INSURANCE REQUIREMENTS

The Contractor shall not commence work until he has obtained all the insurance required under this heading, and until such insurance has been approved by the Owner, nor shall the Contractor allow any subcontractor to commence work until all similar insurance required of the subcontractor has also been obtained and approved by the Owner.

Certificates of insurance must be issued by an authorized representative of the insurance company at the request and direction of the policyholder and must include sufficient information so as to identify the coverage and the contract for Owner's improvements for which they are issued. Certificates of insurance must be issued by a nationally recognized insurance company with a Best's Rating of no less than B+VII, satisfactory to the Owner, and duly licensed to do business in the state of said Contract.

The Contractor shall procure and maintain, during the life of this Contract, Workmen's Compensation Insurance for all of his employees to be engaged in work under this Contract, and he shall require any subcontractor similarly to provide Workmen's Compensation Insurance for all of the latter's employees to be engaged in such work, unless such employees are covered by the protection afforded by the Contractor's insurance. In case any employees are to be engaged in hazardous work under this Contract, and are not protected under this Workmen's Compensation statute, the Contractor shall provide, and shall cause each subcontractor to provide, adequate coverage for the protection of such employees. It is acceptable to use a State-approved Workmen's Compensation Self-Insurance fund.

The Contractor shall take out and maintain during the life of this Contract, Public Liability and Property Damage and shall include Contractual Liability, pursuant to ISO Form CG001, Personal Injury, Libel, Slander, False Arrest, Malicious Prosecution, Wrongful Entry or Eviction, Broad Form Property Damage, Products, Completed Operations and XCU Coverage to be included on an occurrence basis, and to the full extent of the Contract to protect him, the Owner, and any subcontractor performing work covered by this Contract from damages for personal injury, including accidental death, as well as from claims for property damage, which may arise from operations under this contract, whether such operations be by himself or by a subcontractor, or by anyone directly or indirectly employed by either of them. The Contractor shall also maintain automobile liability insurance including "non-owned and hired" coverage. The entire cost of this insurance shall be borne by the Contractor.

The amount of such insurance shall be no less than \$1,000,000 annual aggregate for bodily injury and property damage combined per occurrence.

The City of Naples must be named as Additional Insured on all policies except workers' compensation and professional liability on the insurance certificate <u>and the following must also be stated on the certificate</u>. "These coverage's are primary to all other coverage's the City possesses for this contract only." The City of Naples shall be named as the Certificate Holder. The Certificate Holder shall read as follows: The City of Naples

735 Eighth Street South Naples, Florida 34102

No City Division, Department, or individual name should appear on the Certificate. <u>No other format will be acceptable</u>.

The Certificate must state the bid number and title.

When using the ACORD 25 – Certificate of Insurance only the most current version will be accepted. The City of Naples requires a copy of a cancellation notice in the event the policy is cancelled. The City of Naples shall be expressly endorsed onto the policy as a cancellation notice recipient.

Note: Certificates of Insurance reflecting evidence of the required insurance shall be submitted with the response to the solicitation.

STATEMENT OF NO BID/PROPOSAL

If you do not intend to submit a bid or proposal on this requirement, please complete and return only this page.

Please return via email to purchasing@naplesgov.com or by mail to:

City of Naples, Purchasing Division City Hall, 735 8th Street South Naples, FL 34102 Fax 239-213-7105

Failure to respond 3 times in succession without justification shall be cause for removal of the supplier's name from the proposal mailing list. NOTE: To qualify as a respondent, proposer must submit a "STATEMENT OF NO BID/PROPOSAL" and it must be received no later than the stated bid/proposal opening date and hour.

Bid #_____

Bid Title:

We, the undersigned, decline to bid on the above project for the following reason(s):

- We are not able to respond to the Invitation to Bid by the specified deadline.
- Our Company does not offer this product or service.
- Our current work schedule will not permit us to perform the required services.
- Unable to meet bond requirements.
- Unable to meet insurance requirements.
- Unable to meet bond specifications.
- Specifications are incomplete, or information is unclear
 - (Please explain below).

Other (Please specify below)

Company Name

PH	Fmail
FN	

Name and Title of individual completing this form:

(Printed Name)

(Signature)

(Date)

(Title)



CITY OF NAPLES Purchasing Division

REFERENCE QUESTIONNAIRE

PROVIDED SAME OR SIMILAR SERVICES WITHIN THE LAST 5 YEARS.

It is the bidder's responsibility to contact the Purchasing Department prior to submitting their bid to verify receipt of the required number of references.

Solicitation No.	RFP/ITB Title:
	nust be filled out by the company that has done business with the . If the item is not applicable, please state "n/a".
Relationship with Bidder/Respo	ondent:
Title of last project:	
Year last project completed	
Contract Start/End Dates:	
Contract Amount:	β
How many projects performed:	
How well Contractor coordinate	ed with Owner:
Cooperation or Lack Thereof:	
	:
Were there any conflicts, disp	utes, or other problems:

Yes No

If yes, were they reported early and were they managed well? How were they resolved? Were you satisfied the resolution was fair to both parties?

How satisfied are you with the Bidder/Respondent's ability to perform based on your expectations and according to the contractual arrangements?

Would you contract again with the Bidder/Respondent for the same or similar services? Do you have plans to contract with them again?	Yes	No
Any additional comments?		
This REFERENCE QUESTIONNAIRE is provided by:		
Name of Company		
Address of Company		
Telephone No.		
Email address:		
Date:		
Name and title of person filling out this reference questionnaire:		

Signature of person filling out this reference questionnaire:

This reference form must be emailed to Purchasing@naplesgov.com by the company who is providing the reference on or before BID OPENING DATE & TIME indicated on the Cover Sheet. Please add Solicitation Number to your E-mail subject line.

CONSTRUCTION SPECIAL CONDITIONS

A. TERMS OF CONTRACT

The resulting contract will commence on award and be in effect until completion of the project. Services to be rendered by the contractor shall be commenced subsequent to the execution of this Agreement upon written Notice to Proceed from the City for all or any designated portion of the Project must be completed by the contract dates specified within the Notice to Proceed for construction. Substantial completion must be reached for all aspects of the project no later than 550 days and fully completed no later than 580 days with a Project Close-out time frame of 60 days. Should contractor fail to complete the project within this timeframe, daily LIQUIDATED DAMAGES in an amount consistent with the current Sec. 8-10.2 Florida Department of Transportation Standard Specifications will be assessed.

RETAINAGE; As a method to assure completion of the total project for projects over a total amount of \$100,000, retainage in the amount of five percent (5%) of all work completed will be withheld from the payment. The retainage will be released upon completion of the City's final inspection and submission of a completed WAIVER AND RELEASE OF LIEN UPON FINAL PAYMENT and CONTRACTOR'S FINAL PAYMENT AFFIDAVIT.

B. PROHIBITION OF CONTACT

Under no circumstances should any prospective organization or individual, or anyone acting for or on behalf of a prospective organization or individual, seek to influence or gain the support of any member of the City Council, public official or City staff favorable to the interest of any prospective organization or individual. Likewise, contact with City Council, any public official or city staff against the interests of other prospective organization (s) and or individual(s) is prohibited. Any such activities will result in the exclusion of the prospective organization or individual from consideration by the City.

C. MINIMUM QUALIFICATION

Vendors licensed to do business in the State of Florida, must submit Sunbiz report showing your company registered as "Active". Vendors not licensed to do business in the State of Florida, must submit documentation equal to a Sunbiz report showing your company registered as "Active" Report must contain a footer that contains the date the document was printed. Printed date must be within 30 days of the solicitation opening date.

A signed and dated IRS W-9 form with EIN is required from all vendors.

D. REFERENCES

Vendors must provide a minimum of three (3) verifiable references from similar scopes of work as identified in this solicitation on the City of Naples provided "Reference Questionnaire" form. Failure to provide references that verify the

required experience will cause the Vendor to be deemed non-responsive. Prequalified Vendor References submitted in response to RFQ-23-036 are acceptable. No resubmission is required.

E. INSURANCE

The City's General Insurance Requirements on page 18 apply. Successful contractor(s) must furnish proof of insurance as per specifications. Contractors should investigate and determine they hold the necessary insurance prior to bid submittal.

In addition, Umbrella Liability: with limits of not less than \$10,000,000 per occurrence coverall all work performed under this contact. Builders Risk insurance to provide coverage with limits equal to the full contract amount.

In addition to the City's General Insurance Requirements, the specialized insurance listed below is required.

- 1. U.S.L. & H. and Jones Act (If applicable) Workers Compensation, as required by law for work performed in, on, or near navigable water shall be maintained by the Contractor.
- 2. Watercraft Liability coverage shall be maintained by the Contractor in an amount no less than the General Liability limits referenced in the General Insurance Requirements.
- 3. Protection and Indemnity insurance (P&I) may be accepted in lieu of or in addition to any of the coverages listed above.

F. STATEMENT OF NO BID/PROPOSAL

If you will not be bidding on this producer/service, please help us by completing and returning the Statement of No Bid/Proposal.

F. BID FORMAT

The Contract, if awarded, will be awarded on the basis of material and equipment illustrated and described on the Drawings or specified in the Specification. If a substitution or an "or equal" item is proposed, the proposer must submit this information to the City of Naples Purchasing Department fifteen (15) days prior to the Bid Opening Date and Time for evaluation as an acceptable substitution or an "or equal" item. If the substitution or the "or equal" item is accepted, the City of Naples will issue an Addendum to all Proposers listing the allowable substitution or the "or equal" item. The cost of changes in related work, additional drawings which may be required to illustrate or define the substitute or "or equal" equipment and its relationship to the other parts or portions of the Work shall be paid by the Contractor. No change will be made in the amount of time in which to complete the Work or in the liquidated damages.

G. BID SECURITY / BID BOND

It is the policy of the City of Naples to require a Bid Bond for all construction-related sealed bids estimated to be in excess of **\$100,000**. A bid bond or equivalent financial

security in the amount of five (5) percent of the bid price shall be required and must accompany all bids. The Bid Bond is to be provided by a surety company authorized to do business in the State of Florida or otherwise supplied in a form satisfactory to the City. The bid bond must be submitted with the bid. When the invitation for bids requires a bid bond, noncompliance will result in rejection of the bid. Note that failure or refusal of the awarded bidder to enter into a contract within twenty (20) calendar days after receipt of said contract will result in damages to the City and bid bond will be forfeited to the City as liquidated damages.

H. PROPOSAL CONSTRUCTION PERFORMANCE & PAYMENT BONDS

A Performance and Payment Bond will be required of the Awarded Proposer for any contract that is in excess of \$100,000.00 dollars and will be in an amount equal to 100 (%) percent of the price specified in the Contract. The bond(s) shall be executed by a surety company authorized to do business in the State of Florida, or otherwise secured in a manner satisfactory to the City for the protection of all persons supplying labor and material to the contractor or its subcontractors for the performance of the work provided for in the contract.

I. QUESTIONS

Questions regarding this proposer packet must be received in writing in the Purchasing Division NO LATER THAN **TEN CALENDAR DAYS PRIOR** TO THE BID OPENING DATE TO ENSURE AN ANSWER IS PROVIDED PRIOR TO CLOSING. **Direct all questions to:**

Felix Gomez, CPPB, NIGP-CPP Procurement and Contracts Manager City of Naples, Purchasing Division 735 8th Street South Naples, Florida 34102 PH: (239) 213-7101 FX: (239) 213-7105 <u>fgomez@naplesgov.com</u>

SUBMISSION CHECKLIST

Bidder certifies by signature below that the following Documents are included in the Bid Submittal, fully completed in accordance with the bid requirements. It's the bidder's responsibility to contact the Purchasing Department prior to submitting a bid to ascertain if any addenda have been issued, to obtain any and all such addenda and return executed addenda with this bid. Bidder should check off each of the following items as completed and submit with bid response:

CHECKLIST ELEMENTS	INCLUDED
Bidder must submit one (1) original signature (clearly marked as such) of the response and one (1) copy (clearly marked as such) of the response and one (1) properly indexed Windows© compatible PDF of the original document on a USB Flash Drive containing one PDF file of the full response that is clearly labeled with your company's name, Solicitation number, title and contact information.	
Include any required drawings; descriptive literature; qualifications; schedules; product compliance / exceptions; alternatives; questionnaire; references, forms, tabs, pricing/cost; and any information required of the proposer identified in the text of the bid including information for bid evaluation.	
Include any Professional Licenses (General Contractors license, Underground Utility and Excavation, Builders, etc.) that qualify the firm for this solicitation as well as applicable bond documents, if required. Note if you are not a single prime contractor. List all subcontractors to be used for our project in your bid/proposal and their professional licenses.	
Mandatory FORMS from this document (if not previously submitted in RFQ-23- 036) to be included are: <u>Cover Sheet</u> , <u>Reference Questionnaire</u> , <u>Submission</u> <u>Checklist Sheet</u> , <u>signed IRS W-9 (OCT 2018)</u> . Sunbiz Report, <u>Acknowledgement</u> <u>of Business Type</u> . <u>Certificates of Insurance</u> . <u>Immigration Law Affidavit</u> <u>Certification & Schedule of Values</u> . List of Subcontractors. <u>Materials &</u> <u>Suppliers</u> . <u>Equipment Schedules</u>	
Have an authorized individual sign the appropriate pages including the <u>Cover Sheet</u> with any bid addendums initialed. Include all Addendums with your Proposal.	
 Ensure the following: The Proposal has been signed. Proposal addressed the evaluation criteria. Proposal prices offered have been reviewed. The price extensions and totals have been checked. Tab format was followed. Certificates of Insurance submitted per requirements specified in the bid. 	
Bid document needs to be received by the <u>OPENING DATE & TIME</u> indicated on the Cover Sheet. The mailing envelope must be addressed to: City of Naples Purchasing Division 735 8th Street South Naples, Florida 34102	
The mailing envelope must be sealed and marked with:Bid Number: 24-011 Title: Naples Pier Restoration - ITB Opening Date:04/30/2024 Company Name: Contact information:	
ALL COURIER DELIVERED BIDS MUST HAVE THE BID NUMBER AND TITLE OF OUTSIDE OF THE COURIER PACKET.	N THE

Submitting Vendor Name:_____

Authorized Bidder's Signature:

At the discretion of the Purchasing Manager, bids or proposals with minor irregularities may be accepted and allowed to be corrected when in the best interest of the City.

► Go to www.irs.gov/FormW9 for instructions and the latest information.

	2 Business name/disregarded entity name, if different from above	
Print or type. c Instructions on page 3.	3 Check appropriate box for federal tax classification of the person whose name is entered on line 1. Check only one of the following seven boxes. □ Individual/sole proprietor or single-member LLC □ Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=Partnership) ▶	certain entities, not individuals; see instructions on page 3): Exempt payee code (if any)
Print o Specific Instr	LLC if the LLC is classified as a single-member LLC that is disregarded from the owner unless the owner of the LLC is another LLC that is not disregarded from the owner for U.S. federal tax purposes. Otherwise, a single-member LLC the is disregarded from the owner should check the appropriate box for the tax classification of its owner.	code (if any)
See Spe		and address (optional)
0)	6 City, state, and ZIP code	
	7 List account number(s) here (optional)	
Par		
		ecurity number
reside	up withholding. For individuals, this is generally your social security number (SSN). However, for a ent alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other	
entitie	es, it is your employer identification number (EIN). If you do not have a number, see <i>How to get a</i>	

Note: If the account is in more than one name, see the instructions for line 1. Also see <i>What Name and</i>
Number To Give the Requester for guidelines on whose number to enter.

1 Name (as shown on your income tax return). Name is required on this line; do not leave this line blank.

Part II Certification

Under penalties of perjury, I certify that:

- 1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
- 2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
- 3. I am a U.S. citizen or other U.S. person (defined below); and
- 4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.

Sign	Signature of
Here	U.S. person ▶

TIN. later.

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to *www.irs.gov/FormW9*.

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following.

• Form 1099-INT (interest earned or paid)

- Form 1099-DIV (dividends, including those from stocks or mutual funds)
- Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)

or

Employer identification number

• Form 1099-S (proceeds from real estate transactions)

Date 🕨

- Form 1099-K (merchant card and third party network transactions)
- Form 1098 (home mortgage interest), 1098-E (student loan interest),
- 1098-T (tuition)
- Form 1099-C (canceled debt)
- Form 1099-A (acquisition or abandonment of secured property) Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding, later. By signing the filled-out form, you:

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),

2. Certify that you are not subject to backup withholding, or

3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income, and

4. Certify that FATCA code(s) entered on this form (if any) indicating that you are exempt from the FATCA reporting, is correct. See *What is FATCA reporting*, later, for further information.

Note: If you are a U.S. person and a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

Definition of a U.S. person. For federal tax purposes, you are considered a U.S. person if you are:

• An individual who is a U.S. citizen or U.S. resident alien;

• A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States;

An estate (other than a foreign estate); or

• A domestic trust (as defined in Regulations section 301.7701-7).

Special rules for partnerships. Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax under section 1446 on any foreign partners' share of effectively connected taxable income from such business. Further, in certain cases where a Form W-9 has not been received, the rules under section 1446 require a partnership to presume that a partner is a foreign person, and pay the section 1446 withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid section 1446 withholding on your share of partnership income.

In the cases below, the following person must give Form W-9 to the partnership for purposes of establishing its U.S. status and avoiding withholding on its allocable share of net income from the partnership conducting a trade or business in the United States.

• In the case of a disregarded entity with a U.S. owner, the U.S. owner of the disregarded entity and not the entity;

• In the case of a grantor trust with a U.S. grantor or other U.S. owner, generally, the U.S. grantor or other U.S. owner of the grantor trust and not the trust; and

• In the case of a U.S. trust (other than a grantor trust), the U.S. trust (other than a grantor trust) and not the beneficiaries of the trust.

Foreign person. If you are a foreign person or the U.S. branch of a foreign bank that has elected to be treated as a U.S. person, do not use Form W-9. Instead, use the appropriate Form W-8 or Form 8233 (see Pub. 515, Withholding of Tax on Nonresident Aliens and Foreign Entities).

Nonresident alien who becomes a resident alien. Generally, only a nonresident alien individual may use the terms of a tax treaty to reduce or eliminate U.S. tax on certain types of income. However, most tax treaties contain a provision known as a "saving clause." Exceptions specified in the saving clause may permit an exemption from tax to continue for certain types of income even after the payee has otherwise become a U.S. resident alien for tax purposes.

If you are a U.S. resident alien who is relying on an exception contained in the saving clause of a tax treaty to claim an exemption from U.S. tax on certain types of income, you must attach a statement to Form W-9 that specifies the following five items.

1. The treaty country. Generally, this must be the same treaty under which you claimed exemption from tax as a nonresident alien.

2. The treaty article addressing the income.

3. The article number (or location) in the tax treaty that contains the saving clause and its exceptions.

4. The type and amount of income that qualifies for the exemption from tax.

5. Sufficient facts to justify the exemption from tax under the terms of the treaty article.

Example. Article 20 of the U.S.-China income tax treaty allows an exemption from tax for scholarship income received by a Chinese student temporarily present in the United States. Under U.S. law, this student will become a resident alien for tax purposes if his or her stay in the United States exceeds 5 calendar years. However, paragraph 2 of the first Protocol to the U.S.-China treaty (dated April 30, 1984) allows the provisions of Article 20 to continue to apply even after the Chinese student becomes a resident alien of the United States. A Chinese student who qualifies for this exception (under paragraph 2 of the first protocol) and is relying on this exception to claim an exemption from tax on his or her scholarship or fellowship income would attach to Form W-9 a statement that includes the information described above to support that exemption.

If you are a nonresident alien or a foreign entity, give the requester the appropriate completed Form W-8 or Form 8233.

Backup Withholding

What is backup withholding? Persons making certain payments to you must under certain conditions withhold and pay to the IRS 24% of such payments. This is called "backup withholding." Payments that may be subject to backup withholding include interest, tax-exempt interest, dividends, broker and barter exchange transactions, rents, royalties, nonemployee pay, payments made in settlement of payment card and third party network transactions, and certain payments from fishing boat operators. Real estate transactions are not subject to backup withholding.

You will not be subject to backup withholding on payments you receive if you give the requester your correct TIN, make the proper certifications, and report all your taxable interest and dividends on your tax return.

Payments you receive will be subject to backup withholding if:

1. You do not furnish your TIN to the requester,

2. You do not certify your TIN when required (see the instructions for Part II for details),

3. The IRS tells the requester that you furnished an incorrect TIN,

4. The IRS tells you that you are subject to backup withholding because you did not report all your interest and dividends on your tax return (for reportable interest and dividends only), or

5. You do not certify to the requester that you are not subject to backup withholding under 4 above (for reportable interest and dividend accounts opened after 1983 only).

Certain payees and payments are exempt from backup withholding. See *Exempt payee code*, later, and the separate Instructions for the Requester of Form W-9 for more information.

Also see Special rules for partnerships, earlier.

What is FATCA Reporting?

The Foreign Account Tax Compliance Act (FATCA) requires a participating foreign financial institution to report all United States account holders that are specified United States persons. Certain payees are exempt from FATCA reporting. See *Exemption from FATCA reporting code*, later, and the Instructions for the Requester of Form W-9 for more information.

Updating Your Information

You must provide updated information to any person to whom you claimed to be an exempt payee if you are no longer an exempt payee and anticipate receiving reportable payments in the future from this person. For example, you may need to provide updated information if you are a C corporation that elects to be an S corporation, or if you no longer are tax exempt. In addition, you must furnish a new Form W-9 if the name or TIN changes for the account; for example, if the grantor of a grantor trust dies.

Penalties

Failure to furnish TIN. If you fail to furnish your correct TIN to a requester, you are subject to a penalty of \$50 for each such failure unless your failure is due to reasonable cause and not to willful neglect.

Civil penalty for false information with respect to withholding. If you make a false statement with no reasonable basis that results in no backup withholding, you are subject to a \$500 penalty.

Criminal penalty for falsifying information. Willfully falsifying certifications or affirmations may subject you to criminal penalties including fines and/or imprisonment.

Misuse of TINs. If the requester discloses or uses TINs in violation of federal law, the requester may be subject to civil and criminal penalties.

Specific Instructions

Line 1

You must enter one of the following on this line; **do not** leave this line blank. The name should match the name on your tax return.

If this Form W-9 is for a joint account (other than an account maintained by a foreign financial institution (FFI)), list first, and then circle, the name of the person or entity whose number you entered in Part I of Form W-9. If you are providing Form W-9 to an FFI to document a joint account, each holder of the account that is a U.S. person must provide a Form W-9.

a. **Individual.** Generally, enter the name shown on your tax return. If you have changed your last name without informing the Social Security Administration (SSA) of the name change, enter your first name, the last name as shown on your social security card, and your new last name.

Note: ITIN applicant: Enter your individual name as it was entered on your Form W-7 application, line 1a. This should also be the same as the name you entered on the Form 1040/1040A/1040EZ you filed with your application.

b. **Sole proprietor or single-member LLC.** Enter your individual name as shown on your 1040/1040A/1040EZ on line 1. You may enter your business, trade, or "doing business as" (DBA) name on line 2.

c. Partnership, LLC that is not a single-member LLC, C corporation, or S corporation. Enter the entity's name as shown on the entity's tax return on line 1 and any business, trade, or DBA name on line 2.

d. **Other entities.** Enter your name as shown on required U.S. federal tax documents on line 1. This name should match the name shown on the charter or other legal document creating the entity. You may enter any business, trade, or DBA name on line 2.

e. **Disregarded entity.** For U.S. federal tax purposes, an entity that is disregarded as an entity separate from its owner is treated as a "disregarded entity." See Regulations section 301.7701-2(c)(2)(iii). Enter the owner's name on line 1. The name of the entity entered on line 1 should never be a disregarded entity. The name on line 1 should be the name shown on the income tax return on which the income should be reported. For example, if a foreign LLC that is treated as a disregarded entity for U.S. federal tax purposes has a single owner that is a U.S. person, the U.S. owner's name is required to be provided on line 1. If the direct owner of the entity is also a disregarded entity, enter the first owner that is not disregarded for federal tax purposes. Enter the disregarded entity's name on line 2, "Business name/disregarded entity name." If the owner of the disregarded entity is a foreign person, the owner must complete an appropriate Form W-8 instead of a Form W-9. This is the case even if the foreign person has a U.S. TIN.

Line 2

If you have a business name, trade name, DBA name, or disregarded entity name, you may enter it on line 2.

Line 3

Check the appropriate box on line 3 for the U.S. federal tax classification of the person whose name is entered on line 1. Check only one box on line 3.

IF the entity/person on line 1 is a(n)	THEN check the box for
Corporation	Corporation
 Individual Sole proprietorship, or Single-member limited liability company (LLC) owned by an individual and disregarded for U.S. federal tax purposes. 	Individual/sole proprietor or single- member LLC
 LLC treated as a partnership for U.S. federal tax purposes, LLC that has filed Form 8832 or 2553 to be taxed as a corporation, or LLC that is disregarded as an entity separate from its owner but the owner is another LLC that is not disregarded for U.S. federal tax purposes. 	Limited liability company and enter the appropriate tax classification. (P= Partnership; C= C corporation; or S= S corporation)
Partnership	Partnership
Trust/estate	Trust/estate

Line 4, Exemptions

If you are exempt from backup withholding and/or FATCA reporting, enter in the appropriate space on line 4 any code(s) that may apply to you.

Exempt payee code.

• Generally, individuals (including sole proprietors) are not exempt from backup withholding.

• Except as provided below, corporations are exempt from backup withholding for certain payments, including interest and dividends.

• Corporations are not exempt from backup withholding for payments made in settlement of payment card or third party network transactions.

• Corporations are not exempt from backup withholding with respect to attorneys' fees or gross proceeds paid to attorneys, and corporations that provide medical or health care services are not exempt with respect to payments reportable on Form 1099-MISC.

The following codes identify payees that are exempt from backup withholding. Enter the appropriate code in the space in line 4.

1-An organization exempt from tax under section 501(a), any IRA, or a custodial account under section 403(b)(7) if the account satisfies the requirements of section 401(f)(2)

2-The United States or any of its agencies or instrumentalities

3—A state, the District of Columbia, a U.S. commonwealth or possession, or any of their political subdivisions or instrumentalities

4-A foreign government or any of its political subdivisions, agencies, or instrumentalities

5-A corporation

6—A dealer in securities or commodities required to register in the United States, the District of Columbia, or a U.S. commonwealth or possession

 $7\!-\!A$ futures commission merchant registered with the Commodity Futures Trading Commission

8-A real estate investment trust

9—An entity registered at all times during the tax year under the Investment Company Act of 1940

10-A common trust fund operated by a bank under section 584(a)

11-A financial institution

 $12-A \ \mbox{middleman}$ known in the investment community as a nominee or custodian

13—A trust exempt from tax under section 664 or described in section 4947

The following chart shows types of payments that may be exempt from backup withholding. The chart applies to the exempt payees listed above, 1 through 13.

IF the payment is for	THEN the payment is exempt for
Interest and dividend payments	All exempt payees except for 7
Broker transactions	Exempt payees 1 through 4 and 6 through 11 and all C corporations. S corporations must not enter an exempt payee code because they are exempt only for sales of noncovered securities acquired prior to 2012.
Barter exchange transactions and patronage dividends	Exempt payees 1 through 4
Payments over \$600 required to be reported and direct sales over \$5,000 ¹	Generally, exempt payees 1 through 5 ²
Payments made in settlement of payment card or third party network transactions	Exempt payees 1 through 4

¹ See Form 1099-MISC, Miscellaneous Income, and its instructions.

² However, the following payments made to a corporation and reportable on Form 1099-MISC are not exempt from backup withholding: medical and health care payments, attorneys' fees, gross proceeds paid to an attorney reportable under section 6045(f), and payments for services paid by a federal executive agency.

Exemption from FATCA reporting code. The following codes identify payees that are exempt from reporting under FATCA. These codes apply to persons submitting this form for accounts maintained outside of the United States by certain foreign financial institutions. Therefore, if you are only submitting this form for an account you hold in the United States, you may leave this field blank. Consult with the person requesting this form if you are uncertain if the financial institution is subject to these requirements. A requester may indicate that a code is not required by providing you with a Form W-9 with "Not Applicable" (or any similar indication) written or printed on the line for a FATCA exemption code.

A—An organization exempt from tax under section 501(a) or any individual retirement plan as defined in section 7701(a)(37)

B-The United States or any of its agencies or instrumentalities

C-A state, the District of Columbia, a U.S. commonwealth or possession, or any of their political subdivisions or instrumentalities

D-A corporation the stock of which is regularly traded on one or more established securities markets, as described in Regulations section 1.1472-1(c)(1)(i)

E—A corporation that is a member of the same expanded affiliated group as a corporation described in Regulations section 1.1472-1(c)(1)(i)

F-A dealer in securities, commodities, or derivative financial instruments (including notional principal contracts, futures, forwards, and options) that is registered as such under the laws of the United States or any state

G-A real estate investment trust

H-A regulated investment company as defined in section 851 or an entity registered at all times during the tax year under the Investment Company Act of 1940

I-A common trust fund as defined in section 584(a)

J—A bank as defined in section 581

K-A broker

L-A trust exempt from tax under section 664 or described in section 4947(a)(1)

M-A tax exempt trust under a section 403(b) plan or section 457(g) plan

Note: You may wish to consult with the financial institution requesting this form to determine whether the FATCA code and/or exempt payee code should be completed.

Line 5

Enter your address (number, street, and apartment or suite number). This is where the requester of this Form W-9 will mail your information returns. If this address differs from the one the requester already has on file, write NEW at the top. If a new address is provided, there is still a chance the old address will be used until the payor changes your address in their records.

Line 6

Enter your city, state, and ZIP code.

Part I. Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. If you are a resident alien and you do not have and are not eligible to get an SSN, your TIN is your IRS individual taxpayer identification number (ITIN). Enter it in the social security number box. If you do not have an ITIN, see *How to get a TIN* below.

If you are a sole proprietor and you have an EIN, you may enter either your SSN or EIN.

If you are a single-member LLC that is disregarded as an entity separate from its owner, enter the owner's SSN (or EIN, if the owner has one). Do not enter the disregarded entity's EIN. If the LLC is classified as a corporation or partnership, enter the entity's EIN.

Note: See *What Name and Number To Give the Requester,* later, for further clarification of name and TIN combinations.

How to get a TIN. If you do not have a TIN, apply for one immediately. To apply for an SSN, get Form SS-5, Application for a Social Security Card, from your local SSA office or get this form online at *www.SSA.gov.* You may also get this form by calling 1-800-772-1213. Use Form W-7, Application for IRS Individual Taxpayer Identification Number, to apply for an ITIN, or Form SS-4, Application for Employer Identification Number, to apply for an EIN. You can apply for an EIN online by accessing the IRS website at *www.irs.gov/Businesses* and clicking on Employer Identification Number (EIN) under Starting a Business. Go to *www.irs.gov/Forms* to view, download, or print Form W-7 and/or Form SS-4. Or, you can go to *www.irs.gov/OrderForms* to place an order and have Form W-7 and/or SS-4 mailed to you within 10 business days.

If you are asked to complete Form W-9 but do not have a TIN, apply for a TIN and write "Applied For" in the space for the TIN, sign and date the form, and give it to the requester. For interest and dividend payments, and certain payments made with respect to readily tradable instruments, generally you will have 60 days to get a TIN and give it to the requester before you are subject to backup withholding on payments. The 60-day rule does not apply to other types of payments. You will be subject to backup withholding on all such payments until you provide your TIN to the requester.

Note: Entering "Applied For" means that you have already applied for a TIN or that you intend to apply for one soon.

Caution: A disregarded U.S. entity that has a foreign owner must use the appropriate Form W-8.

Part II. Certification

To establish to the withholding agent that you are a U.S. person, or resident alien, sign Form W-9. You may be requested to sign by the withholding agent even if item 1, 4, or 5 below indicates otherwise.

For a joint account, only the person whose TIN is shown in Part I should sign (when required). In the case of a disregarded entity, the person identified on line 1 must sign. Exempt payees, see *Exempt payee code*, earlier.

Signature requirements. Complete the certification as indicated in items 1 through 5 below.

1. Interest, dividend, and barter exchange accounts opened before 1984 and broker accounts considered active during 1983. You must give your correct TIN, but you do not have to sign the certification.

2. Interest, dividend, broker, and barter exchange accounts opened after 1983 and broker accounts considered inactive during 1983. You must sign the certification or backup withholding will apply. If you are subject to backup withholding and you are merely providing your correct TIN to the requester, you must cross out item 2 in the certification before signing the form.

3. Real estate transactions. You must sign the certification. You may cross out item 2 of the certification.

4. Other payments. You must give your correct TIN, but you do not have to sign the certification unless you have been notified that you have previously given an incorrect TIN. "Other payments" include payments made in the course of the requester's trade or business for rents, royalties, goods (other than bills for merchandise), medical and health care services (including payments to corporations), payments to a nonemployee for services, payments made in settlement of payment card and third party network transactions, payments to certain fishing boat crew members and fishermen, and gross proceeds paid to attorneys (including payments to corporations).

5. Mortgage interest paid by you, acquisition or abandonment of secured property, cancellation of debt, qualified tuition program payments (under section 529), ABLE accounts (under section 529A), IRA, Coverdell ESA, Archer MSA or HSA contributions or distributions, and pension distributions. You must give your correct TIN, but you do not have to sign the certification.

What Name and Number To Give the Requester

For this type of account:	Give name and SSN of:
1. Individual	The individual
2. Two or more individuals (joint account) other than an account maintained by an FFI	The actual owner of the account or, if combined funds, the first individual on the account ¹
3. Two or more U.S. persons (joint account maintained by an FFI)	Each holder of the account
4. Custodial account of a minor (Uniform Gift to Minors Act)	The minor ²
5. a. The usual revocable savings trust (grantor is also trustee)	The grantor-trustee ¹
b. So-called trust account that is not a legal or valid trust under state law	The actual owner ¹
6. Sole proprietorship or disregarded entity owned by an individual	The owner ³
7. Grantor trust filing under Optional Form 1099 Filing Method 1 (see Regulations section 1.671-4(b)(2)(i) (A))	The grantor*
For this type of account:	Give name and EIN of:
8. Disregarded entity not owned by an individual	The owner
9. A valid trust, estate, or pension trust	Legal entity ⁴
10. Corporation or LLC electing corporate status on Form 8832 or Form 2553	The corporation
11. Association, club, religious, charitable, educational, or other tax- exempt organization	The organization
12. Partnership or multi-member LLC	The partnership
13. A broker or registered nominee	The broker or nominee

For this type of account:	Give name and EIN of:
14. Account with the Department of Agriculture in the name of a public entity (such as a state or local government, school district, or prison) that receives agricultural program payments	The public entity
 Grantor trust filing under the Form 1041 Filing Method or the Optional Form 1099 Filing Method 2 (see Regulations section 1.671-4(b)(2)(i)(B)) 	The trust

¹ List first and circle the name of the person whose number you furnish. If only one person on a joint account has an SSN, that person's number must be furnished.

² Circle the minor's name and furnish the minor's SSN.

³ You must show your individual name and you may also enter your business or DBA name on the "Business name/disregarded entity" name line. You may use either your SSN or EIN (if you have one), but the IRS encourages you to use your SSN.

⁴ List first and circle the name of the trust, estate, or pension trust. (Do not furnish the TIN of the personal representative or trustee unless the legal entity itself is not designated in the account title.) Also see *Special rules for partnerships*, earlier.

*Note: The grantor also must provide a Form W-9 to trustee of trust.

Note: If no name is circled when more than one name is listed, the number will be considered to be that of the first name listed.

Secure Your Tax Records From Identity Theft

Identity theft occurs when someone uses your personal information such as your name, SSN, or other identifying information, without your permission, to commit fraud or other crimes. An identity thief may use your SSN to get a job or may file a tax return using your SSN to receive a refund.

To reduce your risk:

- Protect your SSN,
- · Ensure your employer is protecting your SSN, and
- Be careful when choosing a tax preparer.

If your tax records are affected by identity theft and you receive a notice from the IRS, respond right away to the name and phone number printed on the IRS notice or letter.

If your tax records are not currently affected by identity theft but you think you are at risk due to a lost or stolen purse or wallet, questionable credit card activity or credit report, contact the IRS Identity Theft Hotline at 1-800-908-4490 or submit Form 14039.

For more information, see Pub. 5027, Identity Theft Information for Taxpayers.

Victims of identity theft who are experiencing economic harm or a systemic problem, or are seeking help in resolving tax problems that have not been resolved through normal channels, may be eligible for Taxpayer Advocate Service (TAS) assistance. You can reach TAS by calling the TAS toll-free case intake line at 1-877-777-4778 or TTY/TDD 1-800-829-4059.

Protect yourself from suspicious emails or phishing schemes. Phishing is the creation and use of email and websites designed to mimic legitimate business emails and websites. The most common act is sending an email to a user falsely claiming to be an established legitimate enterprise in an attempt to scam the user into surrendering private information that will be used for identity theft. The IRS does not initiate contacts with taxpayers via emails. Also, the IRS does not request personal detailed information through email or ask taxpayers for the PIN numbers, passwords, or similar secret access information for their credit card, bank, or other financial accounts.

If you receive an unsolicited email claiming to be from the IRS, forward this message to *phishing@irs.gov*. You may also report misuse of the IRS name, logo, or other IRS property to the Treasury Inspector General for Tax Administration (TIGTA) at 1-800-366-4484. You can forward suspicious emails to the Federal Trade Commission at *spam@uce.gov* or report them at *www.ftc.gov/complaint*. You can contact the FTC at *www.ftc.gov/idtheft* or 877-IDTHEFT (877-438-4338). If you have been the victim of identity theft, see *www.ldentityTheft.gov* and Pub. 5027.

Visit *www.irs.gov/ldentityTheft* to learn more about identity theft and how to reduce your risk.

Privacy Act Notice

Section 6109 of the Internal Revenue Code requires you to provide your correct TIN to persons (including federal agencies) who are required to file information returns with the IRS to report interest, dividends, or certain other income paid to you; mortgage interest you paid; the acquisition or abandonment of secured property; the cancellation of debt; or contributions you made to an IRA, Archer MSA, or HSA. The person collecting this form uses the information on the form to file information returns with the IRS, reporting the above information. Routine uses of this information include giving it to the Department of Justice for civil and criminal litigation and to cities, states, the District of Columbia, and U.S. commonwealths and possessions for use in administering their laws. The information also may be disclosed to other countries under a treaty, to federal and state agencies to enforce civil and criminal laws, or to federal law enforcement and intelligence agencies to combat terrorism. You must provide your TIN whether or not you are required to file a tax return. Under section 3406, payers must generally withhold a percentage of taxable interest, dividend, and certain other payments to a payee who does not give a TIN to the payer. Certain penalties may also apply for providing false or fraudulent information.

SCHEDULE OF VALUES ITB 24-011 Naples Pier Reconstruction - ITB TH #: 1550.06

ITEM					
NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL COST
1	Mobilization/Demobilization	LS	1		\$
2	Surveys	LS	1		\$
3	Demolition and upland disposal	LS	1		\$
4	Artificial Reef Disposal	PT,PM*	32,000		\$
5	Artificial Reef Debris Prep	HR*	300		\$
6	Concrete Test Piles (4)	LF	1,000		\$
7	Concrete Production Piles	LF	15,500		\$
8	Cast in Place Concrete Substructure	CY	602		\$
9	Framing and Attachments - Main Deck	SF	19372		\$
10	Framing and Attachments - Raised Observation Deck	SF	1188		\$
11	Underwater Camera Box	LS	1		\$
12	Decking	SF	19372		\$
13	Standard Rail	LF	1255		\$
14	ADA Rail	LF	482		\$
15	Guard Rail	LF	850		\$
16	Guard Rail with Grab Bar	LF	81		\$
17	End Pavilion Roof	SF	1792		\$
18	Mid Pavilion Roofs	SF	2357		\$
19	Concession Building, Storage	LS	1		\$
20	Concession Area Roof Additions	SF	2096		\$
21	Restroom Renovations and Existing Roof Renovations	LS	1		\$
22	Food Service	LS	1		\$
23	Showers and Dining Area	LS	1		\$
24	Sand Catch Slab	LS	1		\$

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL COST
25	Relocate Camera Pole	LS	1		\$
26	Beach Access Ramp	SF	219		\$
27	Gates	LS	1		\$
28	IPE Benches	EA	87		\$
29	Fish Cleaning Stations	EA	2		\$
30	Electrical Infrastructure and Receptacles	LS	1		\$
31	Rail Mounted Lights	EA	318		\$
32	Pavillion Roof Lighting	LS	60		\$
33	Fire Protection System	LS	1		\$
34	Potable Water	LS	1		\$
				TOTAL COST	\$
IF ANY	quantities are estimated. Actual quantites will l ROCK PUNCHING/ DRILLING SHOULD BE TO COMENCEMENT. ROCK IS DEFINED AS	REQUIRE	D PERMITTEE URBED CAP RC	OR ENGINEER MU	UST BE NOTIFIED
shall ev	sign alternative(s) shall be provided outside of t aluate each proposed design alternative. Contra	the base bi actor to fur	d and detailed a nish design alte	rnative(s) at Contra	ctor's expense.
TEM NO		UNIT	QUANTITY	UNIT PRICE	TOTAL COST
А	Concrete Test Piles (4) - 14" pile alternate	LF	1000		\$
В	Concrete Production Piles - 14" pile alternate	LF	15500		\$
С	Design Alternative				\$
D					\$
Е					\$
CONTR	RACTOR NOTES:				

This solicitation has potential for P-Card Payment. Does your company accept credit card payment? YES____ NO____

If "yes" please indicate payment options on the below chart.

Payment Options	YES	NO	PERCENT AND/OR TERMS FOR EARLY PAYMENT
Is there a discount for a credit card payment?			
Is there an additional charge for credit card payment?			
Discount for early payment?			
Prompt payment terms:%Days; Net 30 Days			
Company Name:			

EIN:_____

Email:

Name and Title of individual completing this schedule:

(Printed Name)

x_____

(Signature)

(Title)

(Date)

ACKNOWLEDGEMENT OF BUSINESS TYPE

The undersigned Bidder certifies that this bid package is submitted in accordance with the specifications in its entirety and with full understanding of the conditions governing this bid.

BUSINESS ADDRESS of BIDDER:

Company Name		
Address		
City	State	Zip
Telephone No	Fax No	
SIGNATURE OF BIDDER		
If an Individual: Signature		Print Name
Doing business as		
If a Partnership:		
By: Partner Signature		Print Name
If a Corporation:	Corporate Name	
(aCorp	poration) In what State is the Corporation	Incorporated?
If not incorporated under the laws	s of Florida, are you licensed to do busine	ess in Florida? Yes No
Ву:		
Signature	Print N	lame
Sign and Date Form: Certification Under penalties of perjury, I certii	n: ify that the information shown on this form	n is correct to my knowledge.

Signature	Print Name
Title	Date

LIST OF SUBCONTRACTORS

The undersigned states the following is a full and complete list of the proposed subcontractors on this Project and the class of work to be performed by each, and such list will not be added to nor altered without written consent of the owner through the Engineer.

ocontractor Name and Address	Class of Work to be Performed
Ibmitting Vendor Name:	

MATERIALS & SUPPLIERS

The Bidder is required to state below, material and suppliers he proposes to utilize on this project. No change will be allowed after submittal of Bid. Any substitute material proposed must be listed below and must be approved by Engineer, Bidder shall furnish the manufacturer named and the specifications. Acceptance of this Bid does not constitute acceptance of material proposed on this list.

MATERIAL

SUPPLIER

1	
2	
3	
4	
5	
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7	
8	
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10	
11	
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17	
····	
Submitting Vendor Name:	
Authorized Bidder's Signature:	

EQUIPMENT SCHEDULE

	(List only Major Items above \$25,000 value)			
Year	Make	Model	Owned/Leased/Financed	Location

Attachment: Immigration Law Affidavit Certification

This Affidavit is required and should be signed by an authorized principal of the firm, notarized and submitted with formal Invitations to Bid (ITB's) and Request for Proposals (RFP) submittals. Further, Vendors / Bidders are required to enroll in the E-Verify program, and provide acceptable evidence of their enrollment, at the time of the submission of the vendor's/bidder's proposal. Acceptable evidence consists of a copy of the properly completed E-Verify Company Profile page or a copy of the fully executed E-Verify Memorandum of Understanding for the company. Failure to include this Affidavit and acceptable evidence of enrollment in the E-Verify program, may deem the (Vendor / Bidder) being a Contractor, Firm, Consultant, etc., and their Submittal of a Bid (ITB, RFP, RFQ, etc.) as non-responsive.

City of Naples will not intentionally award CITY contracts to any vendor who knowingly employs unauthorized alien workers, constituting a violation of the employment provision contained in 8 U.S.C. Section 1324 a(e) Section 274A(e) of the Immigration and Nationality Act ("INA").

City of Naples may consider the employment by any vendor of unauthorized aliens a violation of Section 274A (e) of the INA. Such Violation by the recipient of the Employment Provisions contained in Section 274A (e) of the INA shall be grounds for unilateral termination of the contract by City of Naples.

Vendor attests that they are fully compliant with all applicable immigration laws (specifically to the 1986 Immigration Act and subsequent Amendment(s)) and agrees to comply with the provisions of the Memorandum of Understanding with E-Verify and to provide proof of enrollment in The Employment Eligibility Verification System (E-Verify), operated by the Department of Homeland Security in partnership with the Social Security Administration at the time of submission of the Vendor's / Bidder's proposal.

Company Name		
Print Name	Title	
Signature	Date	
State of		
County of		
The foregoing instrument was signed and acknow	wledged before me thisday of	, 20, by
who has r	produced	as identification.
(Print or Type Name)	(Type of Identification and Number	
Notary Public Signature		
Printed Name of Notary Public		
Notary Commission Number/Expiration		

The signee of these Affidavit guarantees, as evidenced by the sworn affidavit required herein, the truth and accuracy of this affidavit to interrogatories hereinafter made.

WAIVER AND RELEASE OF LIEN UPON **PROGRESS** PAYMENT

The undersigned lienor, i	n consideration o	f the sum of \$ <u>AM</u>	<u>DUNT</u>	, hereby waives and
releases its lien and right	to claim a lien fo	r labor, services, or m	naterials furn	ished through
DATEto the	<u>e City of Naples, a</u>	Florida municipality	corporation,	on the job of
NAME OF OWNER	to the following p	property:		
Street Address:				
Street Address.				
Folio Number: _				
The waiver and release d	oes not cover an	v retention or labor. s	ervices, or m	aterials furnished after the
date specified.				
DATED on	. 20	Signature:		
		-		
		Print Name:		
		Company:		
		Street:		
		City, State, Zip:	:	
STATE OF FLORIDA COUNTY OF COLLIER				
The foregoing instrument	t was acknowledg	ed before me this	day of	, 20, by
	, who is	personally known to	me or has pr	oduced
	as proo	f of identity, and did	take an oath	
[NOTARIAL SEAL]		Signature of Pe	erson Taking	Acknowledgement
		Print Name		
File Number:				

WAIVER AND RELEASE OF LIEN UPON **FINAL PAYMENT**

The undersigned lienor, in consideration of the final payment in the amount of \$___AMOUNT_____, hereby waives and releases its lien and right to claim a lien for labor, services, or materials furnished to the City of Naples, a Florida municipality corporation, on the job of NAME OF OWNER to the following property: Street Address: Folio Number: DATED on _____, 20____ Signature: Print Name: Company: _____ Street: City, State, Zip: _____ STATE OF FLORIDA COUNTY OF COLLIER The foregoing instrument was acknowledged before me this _____ day of _____, 20__, by _____, who is personally known to me or has produced _____ as proof of identity, and did take an oath. Signature of Person Taking Acknowledgement [NOTARIAL SEAL] Print Name File Number: _____

CONTRACTOR'S PARTIAL PAYMENT AFFIDAVIT

State of Florida County of Collier Property Address:______ Folio Number:______

Before me, the undersigned authority, personally appeared <u>NAME OF AFFIANT</u>, who, after being first duly sworn, deposes and says of his or her personal knowledge the following:

2. Contractor, pursuant to a contract with <u>OWNER/CLIENT</u>, hereinafter referred to as the "Owner," has furnished or caused to be furnished labor, materials, and services for the construction of certain improvements to real property as more particularly set forth in said contract.

3. This affidavit is executed by the Contractor in accordance with section <u>713.06</u> of the Florida Statutes for the purposes of obtaining payment from the Owner in the amount of \$______

4. All work to be performed through <u>DATE OF PAY REQUEST</u> has been fully completed, and all lienors under the direct contract through the above mention date have been paid in full, except the following listed lienors:

Signed, sealed, and delivered this day of	,,
Signature:	
Print Name:	
Company:	
Street:	
City, State, Zip:	
STATE OF FLORIDA COUNTY OF COLLIER	
Sworn to and subscribed before me this o	day of, 20, by
, who is perso	onally known to me or has produced
as proof of ic	lentity, and did take an oath.
[NOTARIAL SEAL]	Signature of Person Taking Acknowledgement
	Print Name

CONTRACTOR'S FINAL PAYMENT AFFIDAVIT

roperty Address:	
LE, of, BUSINESS NAME,	
of Florida, hereinafter referred to as the "Contractor."	
urnished or caused to be furnished labor, materials, and services for	r the
day of,	_
ne this day of, 20, by	
_, who is personally known to me or has produced	
_ as proof of identity, and did take an oath.	
Signature of Person Taking Acknowledgement	
Print Name	
F thinn, n,	



CHANGEORDER FORM

Change Order

No. _____

Date of Issuance:		Effective Date	:
Project:	Owner:		Owner's Contract No.:
Contract:			Date of Contract:
Contractor:			Engineer's Project No.:
The Contract Documents :	are modified as fol	llows upon executio	on of this Change Order:
Description:			
Attachments (list documer	nts supporting cha	nge):	
CHANGE IN CONTR	RACT PRICE:	CHA	ANGE IN CONTRACT TIMES:
Original Contract Price:		Original Contract	Times: 🔲 Working days 🗌 Calendar days
\$	Substantial completion (days or date): Ready for final payment (days or date):		
[Increase] [Decrease] from pre Change Orders No to N		[Increase] [Decrease] No to No	se] from previously approved Change Orders
\$		Substantial completion (days):	
		Ready for final payment (days):	
Contract Price prior to this Cha	ange Order:		or to this Change Order: pletion (days or date):
\$			ayment (days or date):
[Increase] [Decrease] of this C	hange Order:	[Increase] [Decrease] of this Change Order:	
\$	Substantial completion (days or date): Ready for final payment (days or date):		
Contract Price incorporating th	is Change Order:	Contract Times with Substantial comp	th all approved Change Orders: oletion (days or date):
\$			ayment (days or date):
RECOMMENDED:		EPTED:	ACCEPTED:
By: Engineer (Authorized Signa		where (Authorized Signa	
Date:			
Approved by Funding Agen			Date
11 9	, , , , , , , , , , , , , , , , , , , ,		Date:

City of Naples, FL ITB No. 24-011 Naples Pier Reconstruction - ITB

Note: All forms marked REQUIRED must be submitted with this proposal if not submitted in RFQ-23-036.

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City of Naples, FL ITB No. 24-011 Naples Pier Reconstruction - ITB

PROJECT REQUIREMENTS AND SPECIFICATIONS

A. PROJECT DESCRIPTION/PURPOSE OF WORK

The Naples Pier is an iconic feature of the town dating back to the late 1800s. The pier was largely destroyed by Hurricane Ian on Sept 28th, 2022. The storm collapsed the outer portion of the 1000-foot structure when a combination of wind, waves, currents, and related scour toppled the pilings that supported it.

The purpose of the proposed project is to remove remnants of the old pier and rebuild it in the same location but stronger, higher, and more resilient to future storms and hurricanes. This requires a supporting structure of new concrete pilings, concrete bents, and beams, which are designed to remain in place even if a future storm removes the decking and superstructure. The walking surface will consist of IPE hardwood which made up the attractive and popular surface of the old pier. The new pier will be the same 1000' length and 12' width as the old pier but will have bump outs to accommodate benches with unobstructed viewpoints. The superstructure will be made up by two structures mid-way and one at the end of the pier with iconic Polynesian roof lines that differentiate Naples Pier from all others in Florida.

A site visit to the Naples Pier located at the west end of 12th Avenue South will take place directly after the Non-Mandatory Pre-Bid. Prospective Bidders are strongly encouraged to attend.

B. SCOPE OF WORK

Work includes all labor, materials, tools, equipment, and services necessary to perform all operations in connection with the project. Refer to attached engineering, architectural and electrical drawings for details. Upland access to the site will be provided via the laydown yard landward of the pier, where the existing landscaping and flagpole can be removed (the area will be restored by the city post-construction). Additional parking for work crews and trucks will be provided in the nearby pier lot, as shown on the pier construction access plan. Additional/alternate beach access will be at the end of 17th Ave South (an area to be restored by the city).

Once the contractor has mobilized men and equipment to the site, demolition of pier remains, and any other debris will be required. This will involve removal of all portions of the pier that are still standing and all portions which are now submerged. Clean concrete debris may be accepted at one or more of the offshore artificial reefs, in which case the material can be loaded onto barges and transported to the designated reef site. Upland disposal is secondary to that offshore disposal. If a reef site is not available, as determined by the City, the material will have to be hauled from shore to an inland landfill.

A trestle may be constructed adjacent to where the pier will be constructed which will allow for work to safely continue in rough weather when work from a barge would be stopped. Such work stoppages can last for weeks when a strong cold front moves through SW Florida and winds continue to create large waves. The trestle would typically be made up of steel pilings which are driven into the bottom and topped with prefabricated caps and decking which can support a large crane, trucks and other equipment. It would run the entire length of the pier and will be entirely removed when the pier is done.

Large cranes on the trestle and/or on barges will drive concrete piles up to 100' in length to depths specified in the plans. Cast in place bents will be poured with form work around the piles. Options for pre-cast alternatives may be considered. Longitudinal concrete beams or "girders" will span between the bents. Large wood stringers will then span above the bents forming the base framing where IPE decking will be secured for the walking surface and bump outs. IPE will also be used to form the railings which will in turn support lighting for nighttime use. The pier superstructure of mid and end structures will consist of wood posts and beams and other traditional building and roofing materials. Utilities including water, fire protection and electrical will be run in conduits under the decking with spares for future use. Electrical service will be supplied to lights on the railing along the length of the pier and on the superstructure. All pier lighting will have to meet requirements for sea turtles which nest on shore. Power will also be supplied to NOAA for water level, wind, and other sensors on the pier's end. A hatch on the ramp approaching the pier end will enclose an area where a future underwater camera may rise up into it. Power and water will be supplied inside the camera enclosure which will remain empty until the pier is complete.

Additional structures on shore include a new concession area and shade structures, steps down to the beach and various gates that can be deployed. The concession area will have food prep equipment and the existing bathrooms and showers will be renovated with additional shade structures included. The existing bathroom structure on the south side may be removed (and replaced) for construction and trestle access.

C. AWARD OF BID

The City reserves the right to award the bid in a manner that best serves the interests of the City of Naples.

D. PROPOSED PROJECT SCHEDULE

CITY issues ITB	Week of 3/04/2024	
CITY issues Construction Contract:	Week of 6/03/2024	
Substantial Completion	On or about 12/19/2025	
(Subject to change based on exercitation efforts with colorted Contractor)		

(Subject to change based on coordination efforts with selected Contractor)

The schedule for the services described herein will be included in the Bid. The schedule will include milestone dates for the completion of the individual tasks.

E. CONTRACT MANAGEMENT

The Community Services Director and/or his/her authorized representative will serve as the City's Contract Administrator or Owner's Representative.

F. LICENSES AND PERMITS

Licenses may be required by the State of Florida, Collier County, or the City of Naples to perform all or part of this work. Contractors should investigate and determine if they hold the necessary License(s) prior to bid submittal. Permitting may be required for all or part of the requested work. The contractor will be responsible for investigating and determining if permitting is necessary. The contractor will also be responsible for obtaining permits. The Contractor must submit proof that they are Licensed and certified by the State of Florida and/or Collier County.

At a minimum, bidders must submit the following:

- 1. A Certified General Contractors License and be certified and or qualified to complete the project per specifications or equivalent for this project. The contractor can demonstrate how the licenses, equipment, and staff enabled the company to accomplish similar projects successfully.
- 2. Prospective bidders, whether residents or nonresidents of Florida, must provide evidence of proper licensure with their Bids submittal. Such evidence must be in the form of copies of their Florida license which authorizes Bidder to perform the work.
- 3. Prospective bidders must hold the required license for the type of work to be performed at the time their bid response is submitted and for the duration of the contract.
- 4. Prospective bidders must provide a list of the permit(s) they determined are necessary to perform the requested work.
- 5. A Florida Marine Contractors license or equivalent for this project.

G. MANDATORY PRE-CONSTRUCTION MEETING

A mandatory pre-contract / project/work order meeting will be held within fourteen (14) days of contract execution with City of Naples staff, and contractors authorized representative to ensure compliance with all contract requirements regarding this ITB.

H. CONDUCT

The contractor and his employees will conduct themselves in such a manner as to avoid embarrassment to the City of Naples and shall at all times be courteous to the public. Although uniforms are not required, proper clothing shall be worn at all times to include shirts, necessary safety equipment, pants, short or long, and proper footwear. Proper safety equipment shall be worn at all times. Contractor is to perform work using competent and properly equipped personnel.

I. CONTRACTORS EQUIPMENT

All vehicles and equipment must be maintained in good repair, appearance, and sanitary condition at all times. Vehicles must be clearly identified with the name of the company and phone number clearly visible. In addition, the contractor will be responsible for using the necessary safety equipment according to Federal, State, and Local standards while working on the Project as a Contractor of the City.

J. DISPOSAL OF DEBRIS

The awarded bidder(s) must dispose of all debris and other materials gathered from the described work in compliance with all applicable federal, state, and local regulations. Disposal of demolition debris and construction waste is the responsibility of Contractor.

Remove leftover materials, trash, debris, from project site and surrounding areas daily.

K. SCHEDULING OF WORK

- All work will be performed from Monday to Saturday between the hours of 7:00 am to 6:00 pm & pile driving activities are limited to Monday through Friday 8 AM-4 PM unless prior approval has been obtained from the Project Manager. The Contractor will dedicate a Project Manager to the City of Naples until the project is complete.
- 2. The Contractor will correct work deficiencies and/or problems pointed out by the Project Manager within three (3) working days of written notification, by the Project Manager.
- 3. Water and maintenance activities may be performed from Monday to Saturday between the hours of 7:30 am to 5:30 pm.

L. WEATHER DELAYS

Must be able to work in World Meteorological Organization (WMO) state of sea degree 3 (waves of 1.6 to 4.1 feet high) without significant delay in progress.

M. PAYMENT REQUESTS, INVOICES AND WORK REPORTS

- 1. Invoices must be submitted after work is completed with a detailed description of the work performed. Invoices for progress payments may be submitted to the City monthly (every 30 days) for work completed.
- 2. Be in the form of an "Invoice" on company letterhead.
- 3. A AIA Document G702[™]-1992, Application and Certificate for Payment, is to be used in conjunction with AIA Document G703[™], Continuation Sheet. (Prior to using any AIA Contract Document, awarded bidder should consult www.aia.org or a local AIA component to verify the most recent edition.
- 4. Be accompanied by a properly executed "Contractor's Affidavit and Certificate of Completion".
- 5. Cite the purchase order number and the bid number.

- 6. Be submitted to the City Representative/Architect/Engineer of Record in detail sufficient for a proper preaudit and post audit thereof.
- 7. Clearly identify the services, portion of services, and expenses for which compensation is sought; and,
- 8. Be accompanied with applicable "Waivers of Lien".
- 9. The awarded bidder(s) will meet with the Project Manager and set up procedures prior to the start of work.

N. NON-PERFORMANCE

The City reserves the right to cancel the contract with a seven (7) day notice should the Contractor fail to perform up to the requirements and standards identified in the specifications. The city may withhold part or all payments due to the awarded bidder(s) until correction is made.

O. SUB-CONTRACTORS AND MATERIAL SUPPLIERS

If the awarded contractor contemplates the use of sub-contractors, as a further condition of award of a contract, the prospective contractor must certify in writing that all of its subcontractors are appropriately licensed and are registered with the State of Florida in accordance with Florida Statues Chapters 607 or 620, and such statement will include any sub- contractors' corporate charter numbers. For additional information on registering, the prospective contractor should contact the Florida Secretary of State's Office.

Each prospective contractor must submit a list of all proposed sub-contractors and material suppliers intended for this project. No changes to this list shall be made without the express written consent of the City. Any request for changes shall be made in writing to the City, clearly stating the reasons for the change. The City reserves the exclusive right to either approve or reject such request for change. Contractor agrees that the Citys or its consultants decision is final and binding. Contractor und erstands and agrees that he/she it is solely responsible to the City for all work specified herein; and, that subsequent review of sub-contractors and/or material suppliers by the City or its consultants does not relieve the Contractor and/or its surety of any liability or obligation stipulated herein. Failure to comply with the above may result in termination of the contract.

P. PROTECTION OF WORK, PROPERTY AND PERSON

The Contractor shall adequately protect the work, adjacent property, and the public, and shall be responsible for any damages or injury due to his/her actions.

Q. QUALIFICATIONS

It is the City's Intent to Invite the Awarded Firms from RFQ 23-036 to submit a Bid in response to this Invitation to Bid (ITB) to serve as the Prime Contractor for the Project. Any contractor who plans to submit a bid for this Project must be prequalified through the RFQ process. 23-036 Naples Pier Reconstruction– RFQ is posted on the City website: <u>https://www.naplesgov.com/purchasing/page/23-036-naples-pier-reconstruction-rfg</u>.

Supplemental interested contractors not awarded in RFQ 23-036 must notify the City as to submit their qualifications pursuant to RFQ 23-036 and, if deemed qualified, may submit their bids or proposals in response to the solicitation.

A Request for Qualification submittal to perform the Work must be received within twenty (20) days of bid advertisement to allow the necessary time for staff to evaluate the bids. The City will evaluate the bids and notify all bidders by way of an addendum ten (10) days after the cutoff date.

R. INSPECTION

The City reserves the right to make inspections and tests, when deemed advisable, to ascertain that the requirements of the contract are being fulfilled. Should it be found that the standards specified are not being satisfactorily maintained, the city will immediately demand that the contractor comply with the Invitation to Bid to meet these requirements.

The Project Manager will make visits to the site at intervals appropriate to the various stages to observe the progress and quality of the executed work and determine if the work is proceeding in accordance with the Contract Documents. The Project Manager may authorize minor variations from the requirements of the Contract Documents.

S. REJECTING DEFECTIVE WORK

The Contract Manager will have the authority to disapprove or reject work, which he believes to be unacceptable work and not in accordance with Contract Documents. The Facilities Maintenance Superintendent will be the final interpreter of the requirements of the Contract Documents and judge of the acceptability of the work performed. City will notify the contractor immediately of unacceptable work. If work has been rejected, contractor shall correct all defective work within 3 days of notification. The contractor will bear all costs to correct the defective work. If the contractor fails to correct the defective work, or if the contractor fails to perform the work in accordance with the Contract Documents, the City may correct and remedy any such deficiency, with the contractor to bear all costs to correct the defective work.

T. PROTECTION OF FACILITIES, PUBLIC AND PRIVATE PROPERTY

- 1. Contractor shall assume full responsibility for any damage to any property including but not limited to walls, floors, tables, chairs, trees, shrubs, lawns, walks, pavements, roadways, structures, utilities, and underground facilities, resulting from the performance of the work.
- 2. The contractor upon receipt of either written or oral notice to discontinue such practice shall immediately discontinue any practice obviously hazardous in the opinion of the Project Manager. The contractor shall comply with all OSHA and other Federal and State safety standards. Blocking of the public street, except under extreme emergency conditions, shall not be permitted unless prior arrangements have been made with the Contract Manager and the City Police

and Fire Departments and other agencies having jurisdiction over the street to be closed.

3. The Contractor shall adequately protect the work, adjacent property, and the public, and shall be responsible for any damages or injury due to his/her actions.

U. PROTECTION OF OVERHEAD UTILITIES

The operations will be conducted in many areas where overhead electric, telephone, and cable television facilities exist. The contractor shall protect all utilities from damage, shall immediately contact the appropriate utility if damage has occurred, and shall be responsible for all claims for damage due to his operations. The contractor shall make arrangements with the utility for the removal of necessary limbs and branches, which may conflict with, or create a personal injury hazard in the removal of the tree. Delays encountered by the contractor. If overhead electric, telephone, and cable television facilities exist, the contractor shall protect all utilities from damage, shall immediately contact the appropriate utility if damage has occurred, and shall be responsible for all claims for damage due to his operations. The contractor shall make arrangements with the utility if damage has occurred, and shall be responsible for all claims for damage due to his operations. The contractor shall mediately contact the appropriate utility if damage has occurred, and shall be responsible for all claims for damage due to his operations. The contractor shall make arrangements with the utility for the removal of necessary limbs and branches, which may conflict with the work being performed.

V. PROTECTION OF UNDERGROUND UTILITIES

The Contractor will be responsible for following the Florida Underground Facility Damage Prevention & Safety Act (556), OSHA Standard 1926.651, Florida Trench, and Safety Act (Chapter 90-96) and obtaining utility locations by calling Sunshine State One Call of Florida Inc. at 1-800-432-4700. Contractor shall have full responsibility for reviewing and checking all information and data for locating all underground facilities.

W. TRAFFIC CONTROL

- 1. Contractor will be required to furnish traffic control and/or barricades as needed or as required by the State of Florida. Barricading and detouring of the traffic shall be accomplished in conformance with the State of Florida Manual of Uniform Traffic Control Devices for Highway Construction and Maintenance Operations, latest edition. A flagman is required when two-way traffic is obstructed by the removal operation.
- 2. Contractor will be responsible for adequate barricades, warning devices, and the necessary safety equipment according to State DOT standards while working on City, County or State roads as a sub-Contractor of the City.

R. INCURRING COSTS

The City of Naples is not liable for any costs incurred by the offeror submitting a proposal in response to this solicitation. The cost of preparing the proposal shall be the full responsibility of the proposer.

TURRELL, HALL & ASSOCIATES, INC.

MARINE & ENVIRONMENTAL CONSULTING

TODD T. TURRELL, P.E. 3584 EXCHANGE AVE. NAPLES FL 34104 TEL: (239)643-0166 FAX: (239)643-6632 EMAIL: TUNA@THANAPLES.COM

OSBORN ENGINEERING

STRUCTURAL ENGINEERING BYRON EVETTS, P.E. MATT FURJANIC, P.E. **REYNALDO BUENCAMINO, P.E.** AARON LOBAS HEADQUARTERS: 1111 SUPERIOR AVE, SUITE 2100 CLEVELAND, OH 44114 **REGIONAL OFFICE:** 102 COLUMBIA DR STE 105, CAPE CANAVERAL FL 32920 TEL: (321)328-0570 EMAIL: BEVETTS@OSBORN-ENG.COM

QUALUS

ELECTRICAL ENGINEERING

NICK YONNONE SETH KRAVETZ DAVID MINSHALL ROBERT BORDAS HEADQUARTERS: 8490 SEWARD RD, FAIRFIELD, OH 45011 **REGIONAL OFFICE:** 100 COLONIAL CENTER PKWY, STE 400, LAKE MARY FL 32746 TEL: (904)891-4943 EMAIL: NICK.YONNONE@QUALUSCORP.COM

NOTES:

THESE DRAWINGS ARE INTENDED FOR CONSTRUCTION USE.

SITE ADDRESS:

SITE ADDRESS.			
<> 25 12TH AVE S	<> LATITUDE:	N 26.131543	
NAPLES FL 34102	<> LONGITUDE:	W 81.807529	

TODD T. TURRELL REGISTERED PROFESSIONAL ENGINEER LICENSE NO. 39659

DATE: January 18, 2024

TODD T. TURRELL STATE OF FLORIDA, PROFESSIONAL ENGINEER, ICENSE NO. 39659. THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY TODD T. TURRELL, P.E. USING A DIGITAL SIGNATURE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY LECTRONIC COPIES

MHK ARCHITECTURE

SENIOR ARCHITECT MAUREEN H. MINKER 2059 TAMIAMI TRAIL E TEL: (239)331-7092 EMAIL: FLORIDA@MHKARCHITECTURE.COM

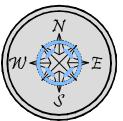
SELECT STRUCTURAL STRUCTURAL ENGINEERING

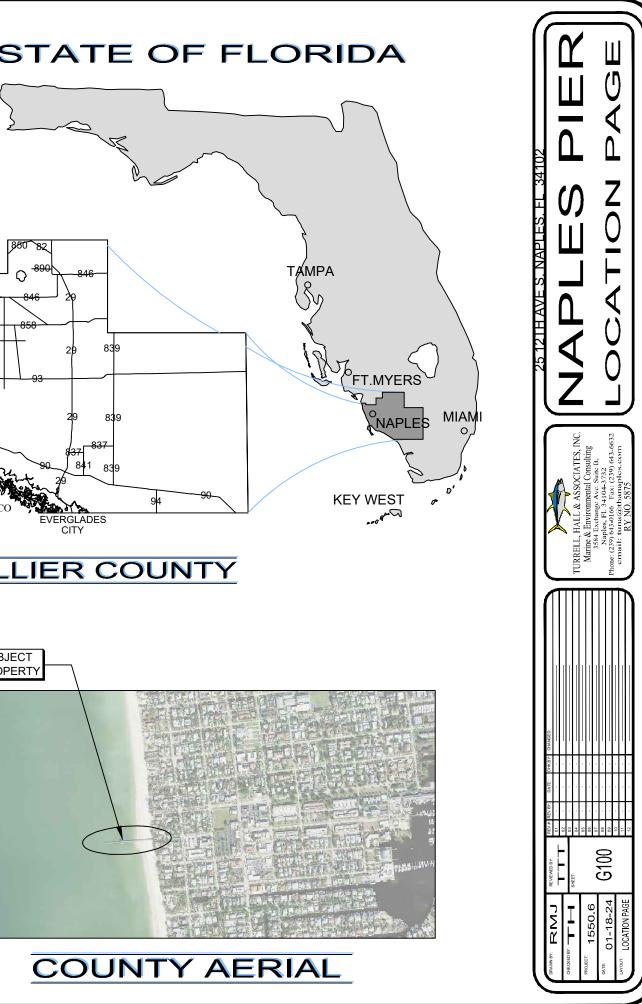
SHAWN ANDERSON, P.E., S.E. 12573 NEW BRITTANY BLVD. FORT MYERS, FL 33907 TEL: (239)210-5090 EMAIL: SHAWN@SELECTSTRUCTURAL.COM

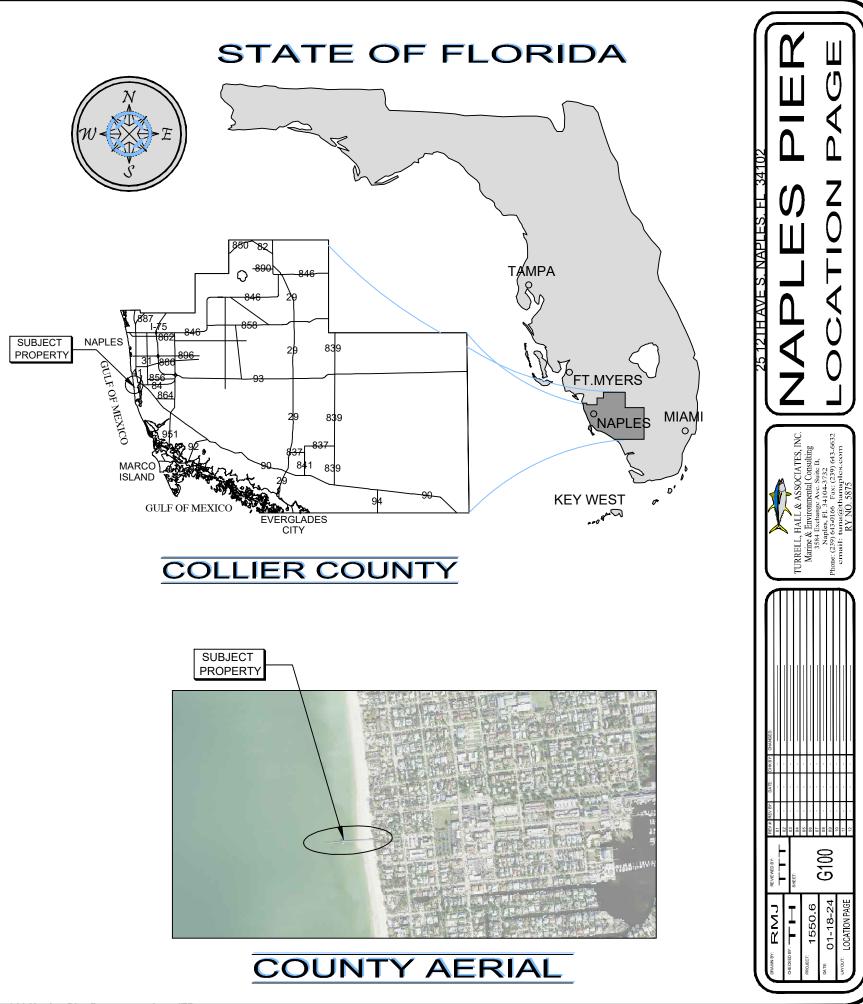
NPS CONSULTING

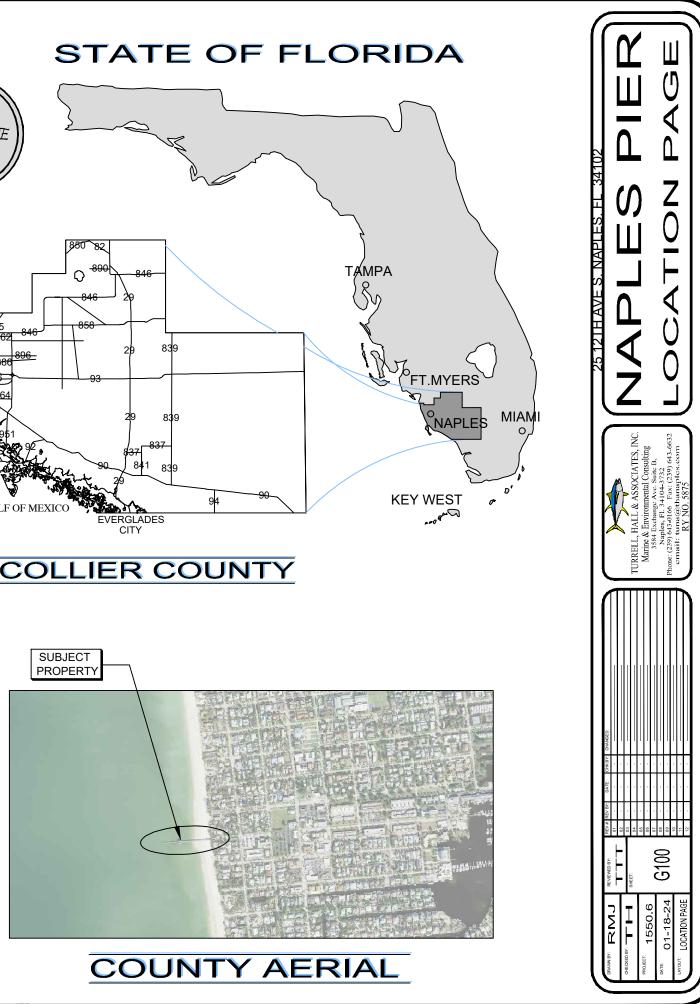
MECHANICAL, ELECTRICAL, PLUMBING **ENGINEERING & REPRESENTATION**

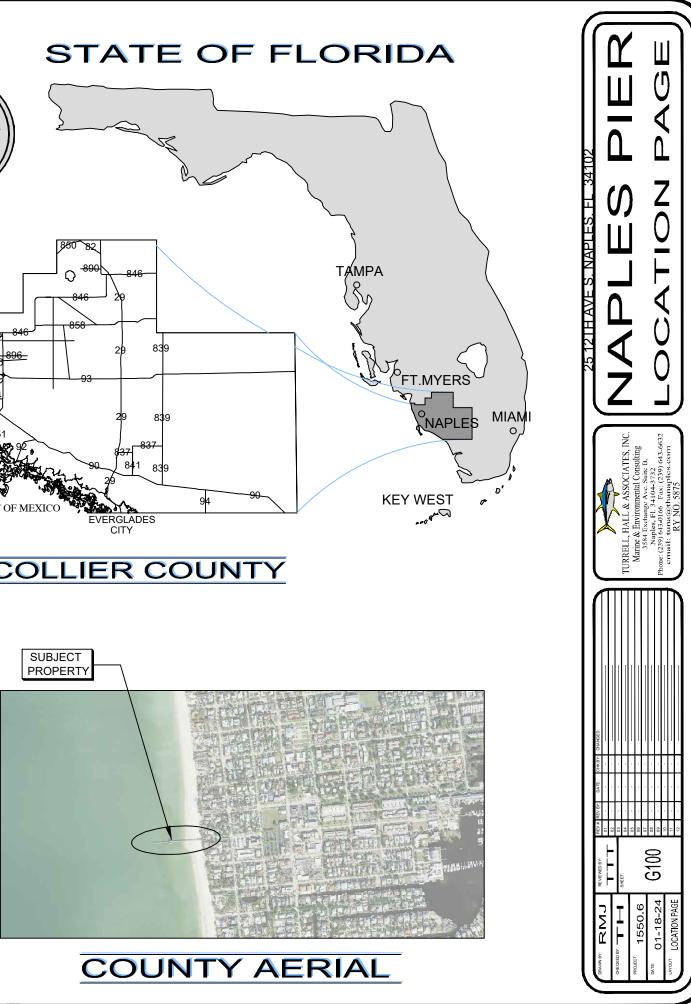
NICHOLAS P. STEWART 2534 SE SANTA BARBARA PL, SUITE 201 CAPE CORAL, FL 33904 TEL: (239)677-3004 EMAIL: NICK@NPSCONSULTINGLLC.COM

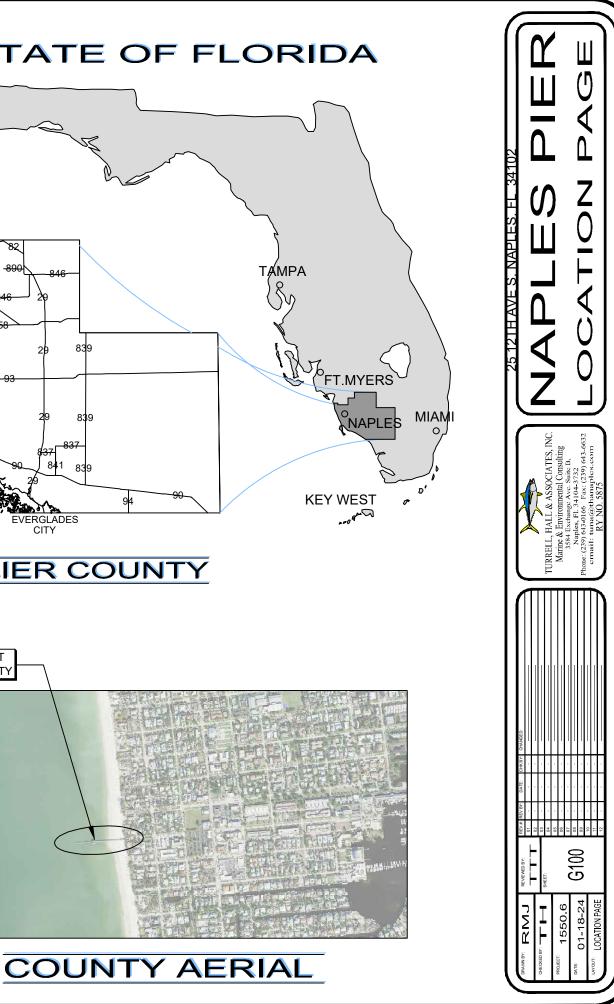














	NAPLES PIER - THA
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C117	OBSERVATION DECK FRAMING
C118	CAMERA HATCH DETAIL
C119	ROOF POST - OBSERVATION DECK POST CONNECTION DETAILS
C120	CROSS SECTION AA
C121	CROSS SECTION BB
C122	CROSS SECTION CC
C123	CROSS SECTION DD
C124	DOCK DETAILS 1
C125	DOCK DETAILS 2
C126	FISH CLEANING STATION DETAILS
C127	STAIR DETAILS 1
C128	STAIR DETAILS 2
C129	RAILING PLAN
C130	RAILING DETAILS 1
C131	RAILING DETAILS 2
U100	FIRE PLAN
U101	FIRE DETAILS
U102	WATER PLAN

NAPLES PIER - OSBORN ENGINEERING	
Sheet Number	Sheet Title
S.001	GENERAL NOTES
S.002	SPECIAL INSPECTIONS
S.101	OVERALL PLAN VIEW
S.101A	ENLARGED PLANS
S.101B	ENLARGED PLANS
S.301	TYPICAL DETAILS
S.302	PRESTRESSED CONCRETE PILE TYPICAL DETAILS
S.401	STRUCTURAL SECTIONS
S.402	STRUCTURAL SECTIONS
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	NAPLES PIER - QUALUS			
Sheet	Number	Sheet Title		
E0	100	COVER SHEET		
EC	101	EQUIPMENT SPECIFICATIONS		
E0	600	SINGLE LINE DIAGRAM W/LOAD CALCULATIONS		
EC	601	PLAN VIEW LAYOUT PG. 1		
EC	601	PLAN VIEW LAYOUT PG. 2		

	NAPLES PIER - MHK
Sheet Number	Sheet Title
G.000	COVER SHEET
G.100	PROJECT INFORMATION
G.200	BUILDING SYSTEMS & PARTITION TYPES
LS.100	ADA COMPLIANCE
LS.102	LIFE SAFETY PLAN
LS.103	LIFE SAFETY PLAN - ENLARGED PLANS
LS.104	ADA RAILING PLAN
A.000	OVERALL SITE PLAN/ELEVATIONS
A.001	SITE PLAN (CONCESSIONS / OPEN AIR DINING)
A.002	END-PAVILION FLOOR PLAN / ELEVATIONS
A.003	MID-PAVILION FLOOR PLAN / ELEVATIONS
A.004	PIER ACCESS DEMO PLAN
A.005	PIER ACCESS FLOOR PLAN / ELEVATIONS
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A.006	RCP - PIER ACCESS / CONCESSIONS
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A.008	MID-PAVILION ELEVATIONS
A.009	PIER ACCESS DEMO - ELEVATIONS
A.010	PIER ACCESS DEMO - ELEVATIONS
A.010	PIER ACCESS DEMO - ELEVATIONS
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A.012	END PAVILION SECTIONS
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A.014	PIER ACCESS SECTIONS
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A.017	
A.018	FRAMING PLAN & DETAILS
A.019	3D VIEW - OVERALL PIER FRAMING
A.020	
A.021	3D VIEWS - PIER DECK ACCESS
A.022	WINDOW AND DOOR SCHEDULE
A.022A	DOOR DETAILS
A.022B	WINDOW DETAILS
A.023	ROOM FINISHES
A.024	ROOM FINISH DETAILS
A.025	DETAILS
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A.030	CONCESSIONS - KITCHEN FLOOR PLAN
A.036	CONCESSIONS DINING AREA DETAILS
E1	ELECTRICAL SPECIFICATIONS
E2	ELECTRICAL POWER FLOOR PLAN (CONCESSIONS/DINING)
E2	ELECTRICAL LIGHTING PLAN
E3	(CONCESSIONS/DINING)
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H1	HOOD
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P1	PLUMBING NOTES & SCHEDULES
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S.1.0	GENERAL NOTES
S.2.0	END PAVILION COLUMN LAYOUT
0.2 0	
S.2.1	MID PAVILION COLUMN LAYOUT
S.2.1 S.2.2	PIER ACCESS COLUMN LAYOUT
S.2.1 S.2.2 S.4.0	PIER ACCESS COLUMN LAYOUT END PAVILION ROOF FRAMING PLAN
S.2.1 S.2.2 S.4.0 S.4.1	PIER ACCESS COLUMN LAYOUT END PAVILION ROOF FRAMING PLAN MID PAVILION ROOF FRAMING PLAN
S.2.1 S.2.2 S.4.0 S.4.1 S.4.2	PIER ACCESS COLUMN LAYOUT END PAVILION ROOF FRAMING PLAN MID PAVILION ROOF FRAMING PLAN PIER ACCESS LOW ROOF FRAMING PLAN
S.2.1 S.2.2 S.4.0 S.4.1 S.4.2 S.4.3	PIER ACCESS COLUMN LAYOUT END PAVILION ROOF FRAMING PLAN MID PAVILION ROOF FRAMING PLAN PIER ACCESS LOW ROOF FRAMING PLAN PIER ACCESS HIGH ROOF FRAMING PLAN
S.2.1 S.2.2 S.4.0 S.4.1 S.4.2	PIER ACCESS COLUMN LAYOUT END PAVILION ROOF FRAMING PLAN MID PAVILION ROOF FRAMING PLAN PIER ACCESS LOW ROOF FRAMING PLAN

NAPLES PIER - MHK-NPS CONSULTING				
Sheet Number	Sheet Title			
P1	SCHEDULES			
P2	PLUMBING PLAN			
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M1	MECHANICAL PLAN			
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NAPLES PIER - MHK-SELECT STRUCTURAL				
Sheet Number	Sheet Title			
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S.2.0	END PAVILION COLUMN LAYOUT			
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S.4.0	END PAVILION ROOF FRAMING			
S.4.1	MID PAVILION ROOF FRAMING			
S.4.2	ACCESS PAVILION ROOF FRAMING			
S.4.3	ACCESS PAVILION ROOF FRAMING			
S.5.0	ROOF DETAILS			
S.5.1	ROOF DETAILS			



TECHNICAL SPECIFICATIONS

1. Design Criteria

- a. Governing Code(s): 2020 Florida Building Code
- 2. Order of precedence
 - a. In the event of discrepancies, order of precedence shall be as follows: Environmental permit conditions, Turrell, Hall & Associates plans, Osborn Engineering Plans, MHK Architecture Plans, Qualas Engineering plans.
- 3. Surveys: Contractor shall be responsible for their own stakeout survey to ensure proper placement of the structure. Since the project is within a Sovereign Submerged Land Lease the pier shall be placed within +/-2" of the designed locations which will be confirmed by the as-built survey supplied by the contractor at the completion of dock installation. Any deviations from this tolerance will need to be remedied or approved by the Owner and the FDEP prior to final payment.
 - a. All surveys shall reference NAVD '88 vertical datum
 - b. All surveys supplied to EOR shall be geo-referenced and shall reference Florida State Plane Coordinates East Zone
 - c. All bathymetric surveys shall follow the minimum specifications as outlined in US Army Corps of Engineers ER 1110-2-8164 Policies, Guidance, and Requirements for Hydrographic Surveying and Mapping Digital Products
 - d. Owner will provide current Sovereign Submerged Land Lease survey for reference.
- 4. Existing Conditions
 - a. Prior to construction, contractor shall become familiar with site conditions and notify Engineer in writing if there are any discrepancies or any conditions that may affect completion of the project.
 - b. Contractor is responsible for the protection of any existing facilities from damage due to construction activities. Contractor shall be responsible for repairs should any damages occur.
 - c. Contractor shall be responsible for video and physical survey of adjacent properties and staging/ access areas prior to commencing work to establish a baseline for determining any damages or refute any claim. Must make report available to staff prior to commencing work.
 - d. Contractor shall provide vibration monitoring to determine amplitude and frequency of construction related vibration

5. Staging and Site Access

- Contractor is responsible for site security and safety within any staging areas they choose to utilize during the project.
- b. Contractor is responsible for site restoration in staging areas, unless otherwise noted.
- c. All upland work to be contained within the City of Naples' property lines.
- d. Contractor to provide access corridor for pedestrian traffic to safely travel north/south on the beach through the work area. Shipping containers or similar approved method.
- e. Turnaround area
- i. Landscape island may be removed for additional staging. Contractor will be responsible for removal if needed. Owner will be responsible for replacement.
- ii. Other trees in this area are to be protected and preserved.
- iii. Access to all residential driveways must be maintained at all times.
- f. Parking lot
- i. The parking area on the southeast corner of 12th Ave S and Gulf Shore Blvd S may be used for additional staging. Access to the dumpster in this area must be maintained at all times.
- g. 17th Ave S
- i. The beach access and parking area located at 17th Ave S may be used for additional staging and equipment access.
- ii. Equipment will not be permitted on the beach between this location and the project site during Sea Turtle Nesting Season.
- 6. Demolition
 - a. Scope
 - i. The existing restroom buildings and foundations are to remain with the exception of any cut-offs indicated in the architectural plans. Any proposed alterations or temporary movement of existing buildings for access must be approved by the EOR.
 - ii. Existing concrete piles and bents in between and underneath the restroom buildings are to remain.
 - iii.All structures waterward of the restroom buildings are to be removed.

- iv.All wood stringers, decking, railing and associated fasteners including that around and between the restroom buildings is to be removed.
- v. Contractor shall document lengths of existing piles as they are removed.
- b. Concrete Debris
- i. Concrete debris is to be prepped and disposed of at the approved artificial reef sites shown in the plans.
- ii. Concrete debris prep requirements:
 - 1. All Asian Green Mussels affixed to concrete must be killed with torch or other approved method before concrete is deployed at reef sites
 - 2. All exposed rebar must be cut flush with concrete surface
- iii.Minimum size for reef sites is 1 cubic foot. Smaller pieces shall be handled in accordance with the same requirements as for "non-concrete debris".
- iv. All pilings shall be completely removed or cut off minimum 10 feet below substrate.
- v. Contractor shall submit proposed method for verification of debris tonnage. Ie. draft measurements on disposal barge or other methods.
- c. Non-concrete debris
- i. All non-concrete debris and items indicated to be removed shall be removed from the Site/Owner's property and properly disposed of by the Contractor in a permitted sanitary landfill or C&D landfill, as is appropriate for the material being removed.
- d. Submerged debris
- i. Much of the existing pier has been toppled by Hurricane Ian and is scattered on the sea floor in the vicinity of the pier. Debris on the sea floor within the area shown in the drawings must be removed.
- ii. Any debris small enough to fit inside a 1 cubic foot box will be acceptable to remain
- e. The Contractor shall immediately remove and properly dispose of any debris that enters the water in or outside of the construction area during the demolition of the indicated structures.
- f. Site will be cleaned daily of debris.
- g. Proper electric and water disconnects in the work area are the responsibility of the Contractor.
- h. Contractor shall be responsible for all disposal fees and shall include said fees its bid.
- 7. Framing
 - a. Framing members including but not limited to all stringers, cap timbers, fascia boards, blocks, and posts shall be rough cut 0.60 CCA SYP No. 1, unless otherwise noted.
 - b. All stringer joints shall occur above concrete bents
 - c. Fasteners shall be 304/305 stainless steel, unless otherwise noted
 - d. Lumber dimensions are rough cut (RC), unless otherwise noted

8. Decking

- a. Decking shall be 5/4"x6" IPE hardwood, placed with concave side down when applicable
- b. All exposed IPE wood cuts to be sealed.
- c. Decking screws and any other fasteners affixed to deck boards shall be 316 stainless steel, unless otherwise noted
- d. Decking shall be installed with full length deck boards, no joints, except where lengths exceed 12 feet.
- e. Any decking joints shall be centered over stringers and line up with adjacent joints
- f. All decking shall be rasped or sanded to finish edges.
- g. All gaps shall be straight and equal as measured under normal conditions (75 degrees Fahrenheit)9. Railings
 - a. All railing lumber shall be IPE hardwood in the sizes indicated on the drawings
 - b. All railing screws, carriage bolts, nuts, and washers shall be 316 stainless steel
 - c. All rail boards shall be rasped or sanded to finish edges
 - d. All rail posts shall be vertically oriented including over ramps and stairs
 - e. Guardrail
 - i. Guardrail shall utilize minimum 3/16" diameter grade 316 stainless steel cable, Atlantis Rail Systems or approved equivalent
 - ii. Spans between tensioners not to exceed 50 feet.



- 10. Fasteners
 - a. All fasteners shall be minimum 304/305 grade stainless steel, including any temporary hardware
 - b. All decking and railing screws and other fasteners exposed on the surface of decking and railing components shall be 316 grade stainless steel, unless otherwise noted
 - c. All screw lines shall be in line with 1/16th inch tolerance from a string line
 - d. For any part of the work requiring cast-in-place all thread or bolts, contractor may submit alternative drill/epoxy method to EOR for approval
 - e. For any welded components, contractor shall submit proposed weld pattern to EOR for approval
 - f. Fastener holes through brackets shall be centered on bracket face, unless otherwise noted/dimensioned on drawings
 - g. No impact drivers shall be used on stainless fasteners.

11. Water

- a. Installation:
- i. The plumbing equipment and installation shall be per the Florida plumbing code latest edition with local amendments.
- ii. All plumbing shall be pressure tested prior to connecting to existing utilities. Test results shall be signed by the licensed plumber and provided to the EOR.
- iii.Water systems shall be tested after rough-in and before connecting fixtures. Piping shall be tested to at least 100 psig and pressure shall be maintained for at least 2 hrs.
- iv.All installation, support brackets, hangers, and fastenings to be #316 S/S
- v. Locations for all water spigots are located via the Turrell, Hall and Associates plans.
- vi.All water spigots for potable water to have the required back flow preventer.
- vii. All branch lines for spigot piping to be 3/4"
- b. Pipe Type: "HDPE" High Density Polyethylene or SCH80 PVC
- i. Water trunk lines shall be HDPE SDR11 pressure rated pipe with heat fused joints. The piping shall have UV stabilizers and conform with ASTM D3350 and ASTM F714.
- ii. Ball valves for service valves shall be full port type.
- iii.No bushings will be allowed, any reduction in pipe size shall be completed using reduction fittings.
- iv.During construction all pipe openings not being worked on shall be plugged or capped to prevent foreign debris entering the system.
- v. All pipe hangers, straps, nuts, bolts, angle supports, etc. shall be type 316 stainless steel.
- vi.Hanger straps shall be a minimum 1-1/4" wide 14 gage stainless steel.
- vii. Piping shall be supported 4ft O.C. maximum with interference fit straps to restrain expansion/contraction.
- c. Notes:
- i. All domestic water supplied plumbing piping shall be disinfected with chlorine before it is placed into operation. The liquid chlorine shall conform to federal specification BB-C-120. The chlorine shall contain at least fifty parts per million of available chlorine and shall remain in the system for not less than 16 hours.
- ii. All valves shall be opened and closed at least 4 times during disinfecting. After the disinfecting process is complete, the chlorinated water shall be flushed from the system with clean, fresh water until the residual chlorine content is less than two-tenths parts per million.

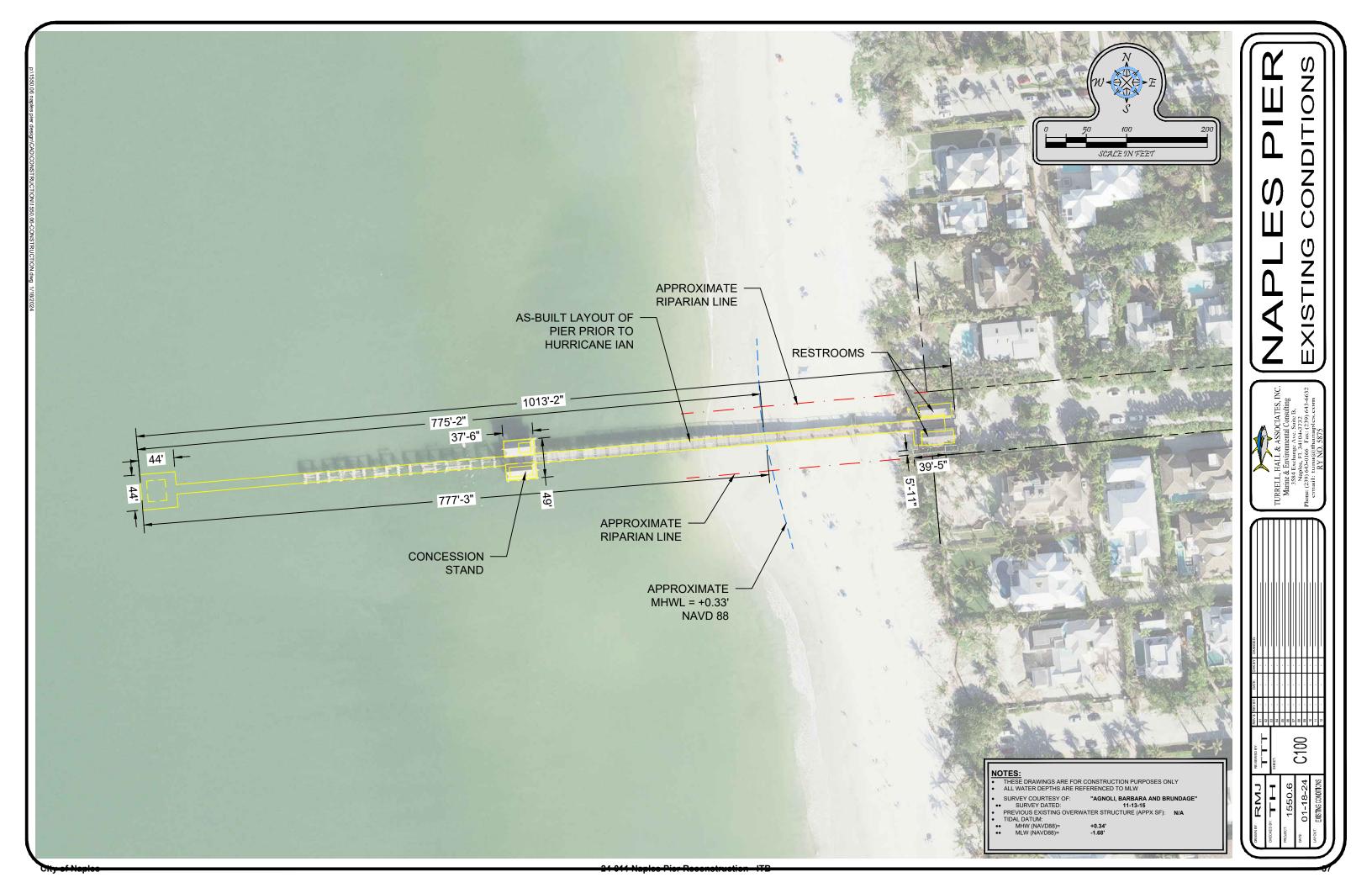
12. Fire

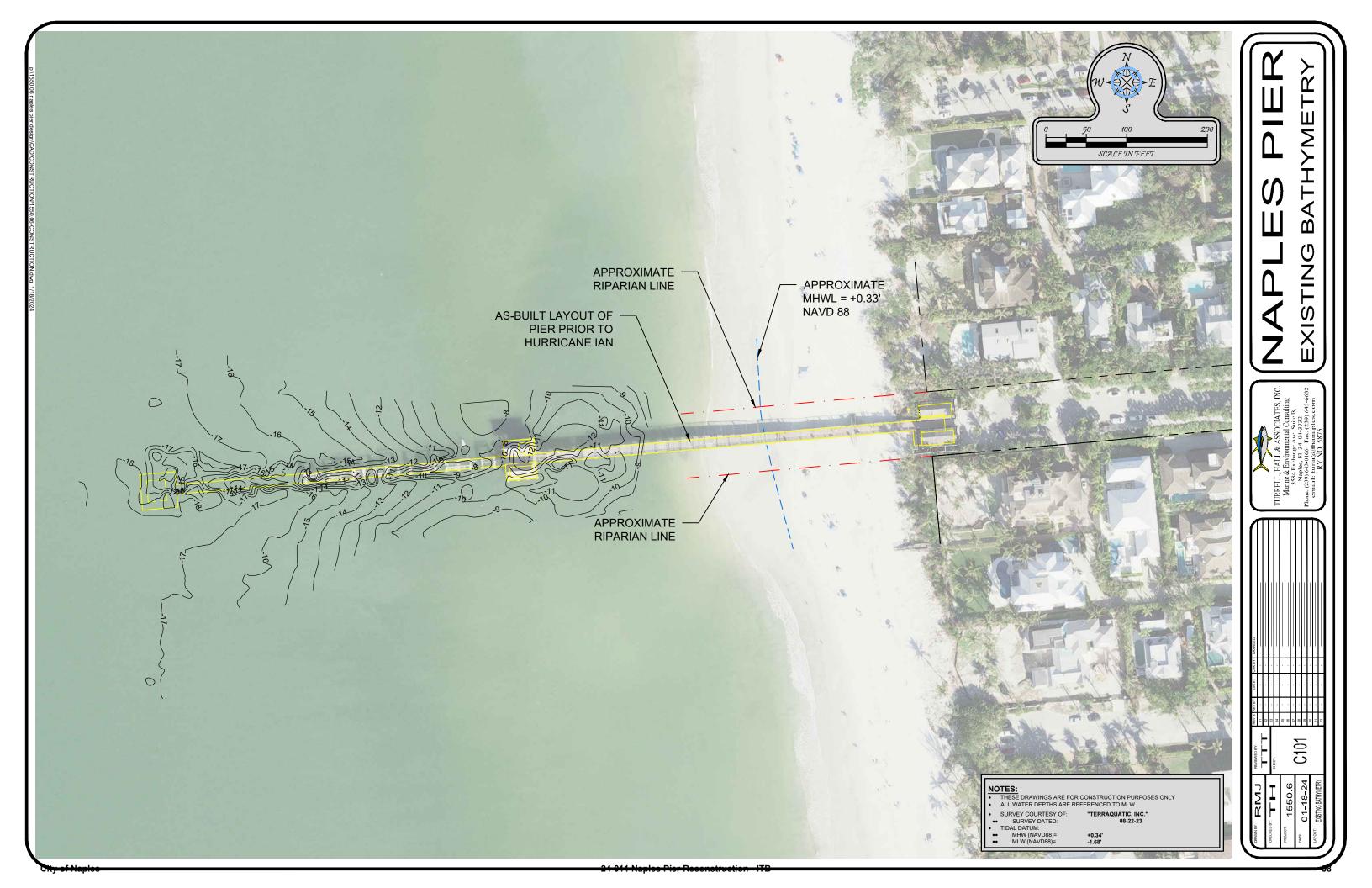
- a. Installation:
- i. Installation of al piping shall be per the latest edition accepted by the local AHJ of the Florida Building Code - Plumbing edition, NFPA 303, and NFPA 14
- b. Pipe Type: All piping shall be 316 stainless steel, and all fittings shall be clamped.
- i. All piping shall be tested to at least 200 psig and pressure shall be maintained for a minimum of 2 hrs.
- ii. All pipe hangers, straps, nuts, bolts, angle supports, etc. shall be stainless steel.
- iii.Piping shall be strapped to pier system utilizing 2"X4" IPE fastened to underside of stringers, not to exceed 4' on center.
- iv.All 90-degree bends shall be long radius.
- v. Contractor shall submit all materials to EOR and fire department prior to commencement for necessary approvals.
- vi.All underground piping to have a fire inspection, and be marked utilizing marking balls, wire and

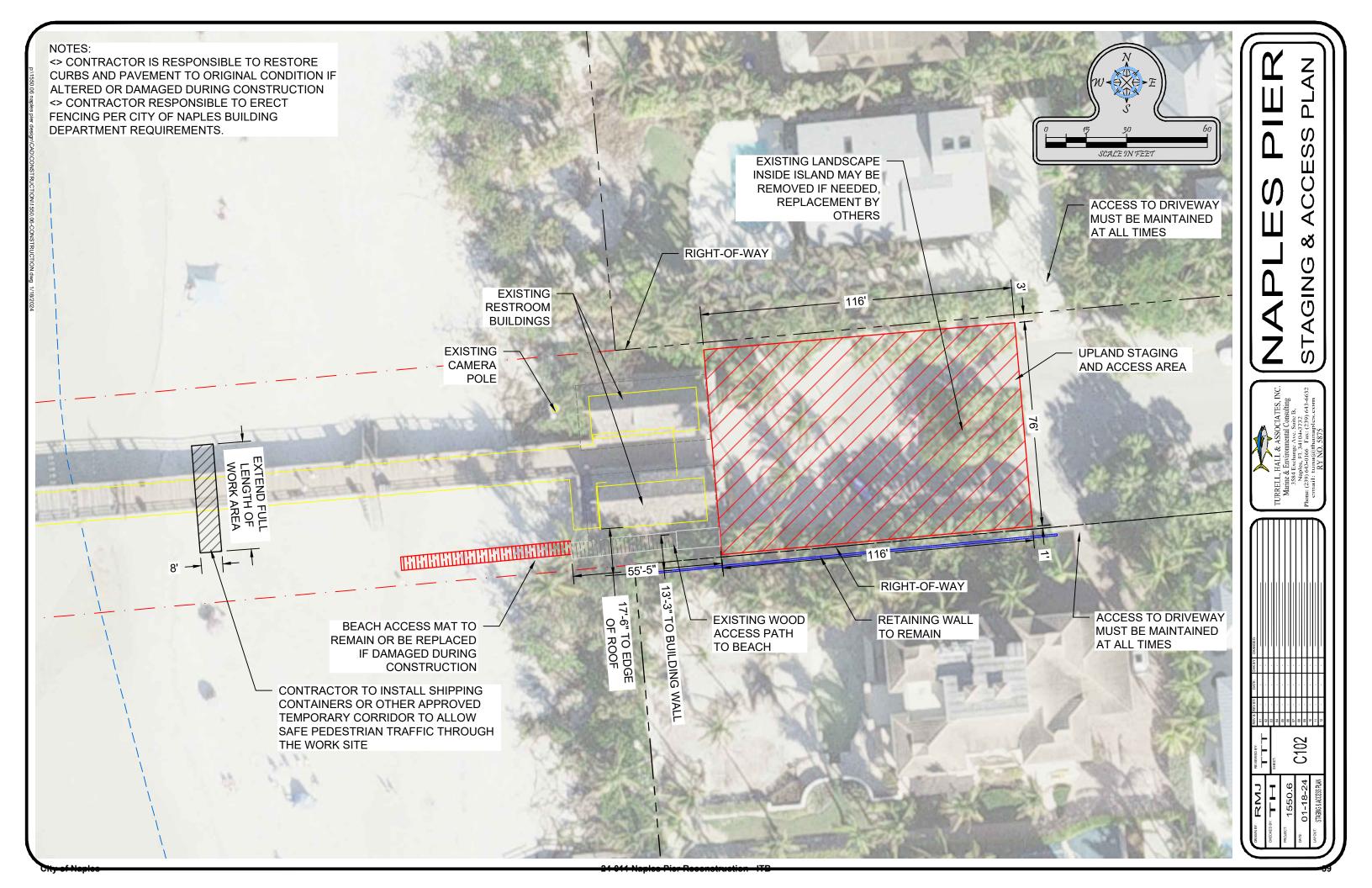
ity of maples or tape installed during the backfill process to identify the location of the fire in

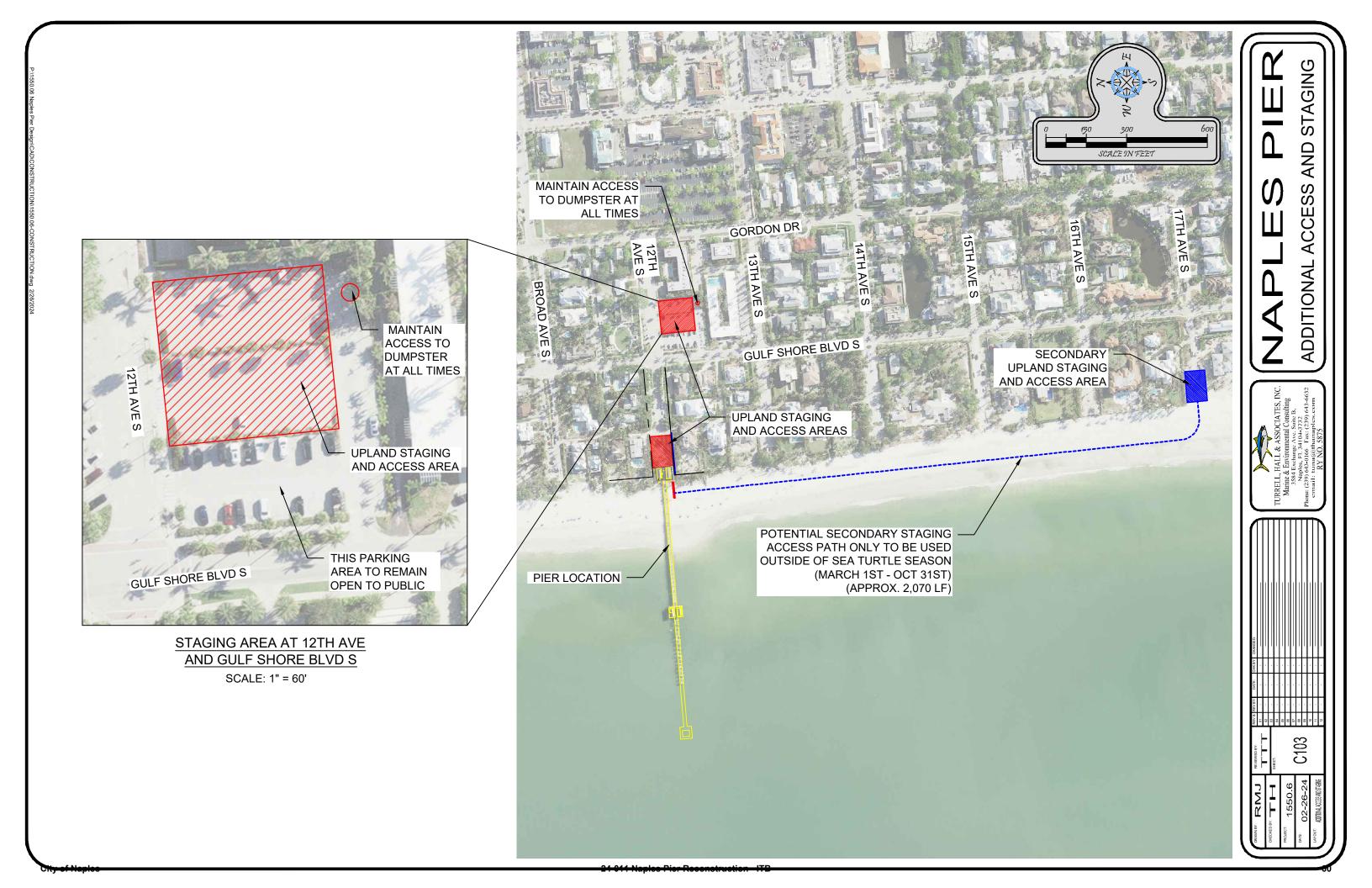
vii.All piping runs should be straight - attachment method shall take into account offsets for fittings. viii.Contractor shall submit proposed attachment methods for appeal.

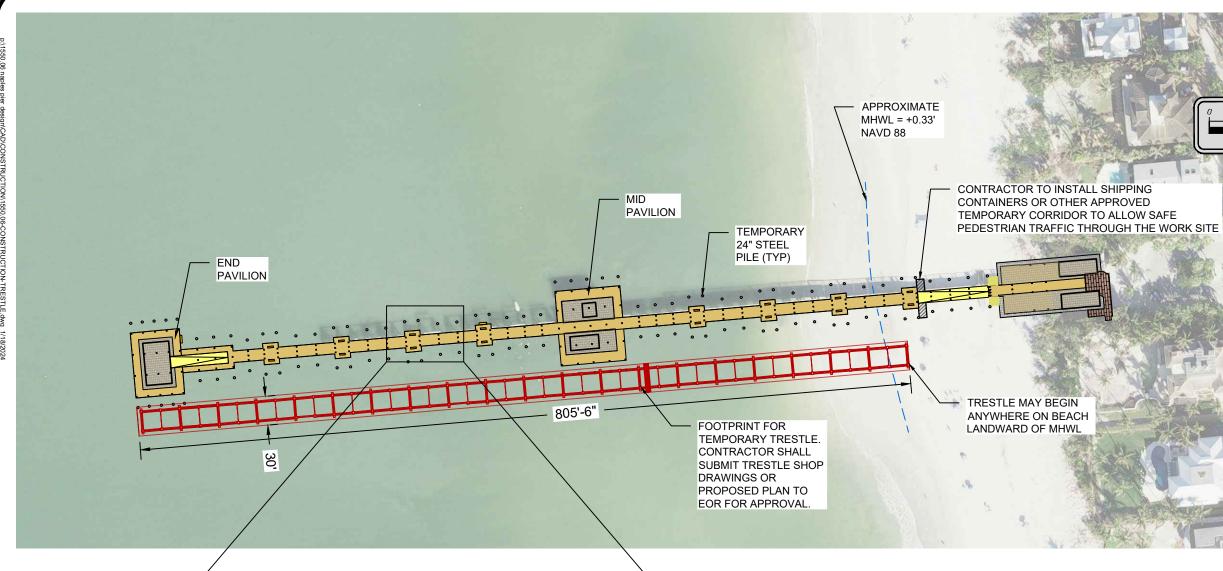


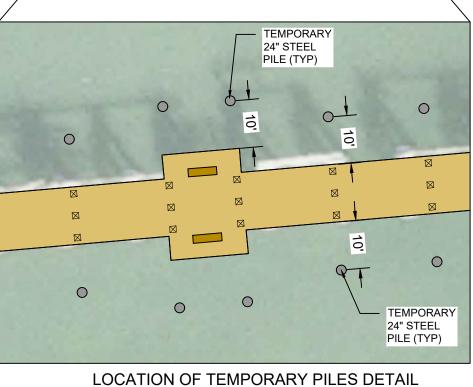


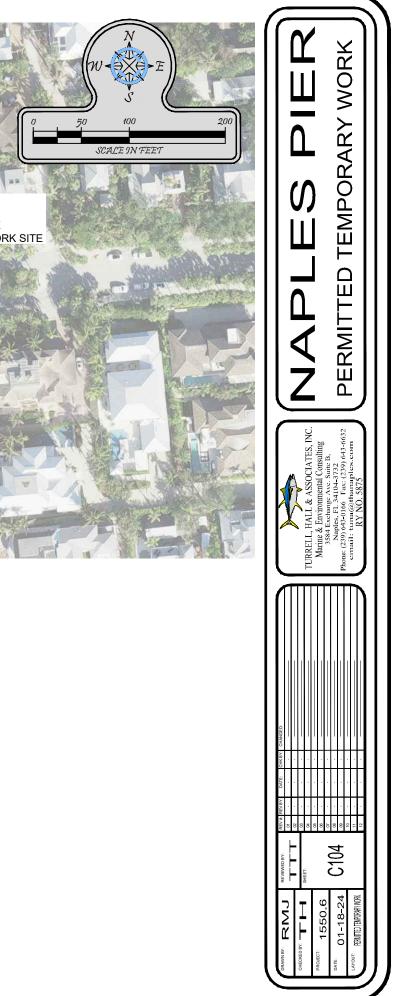


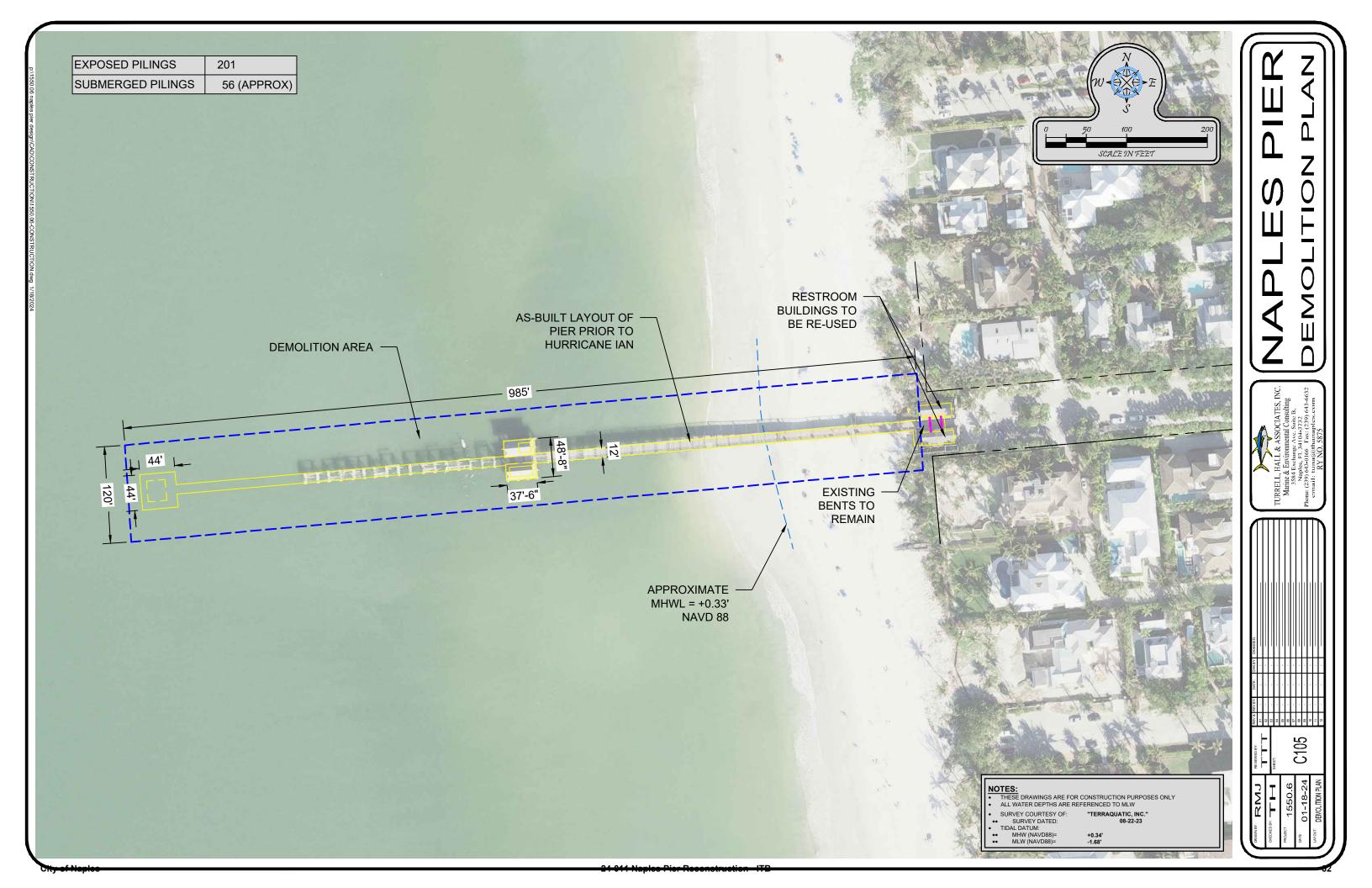


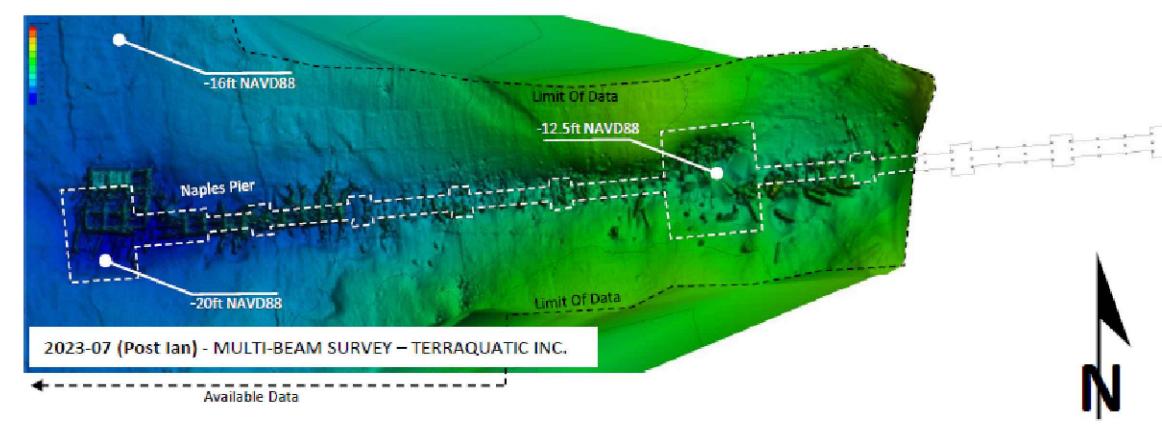


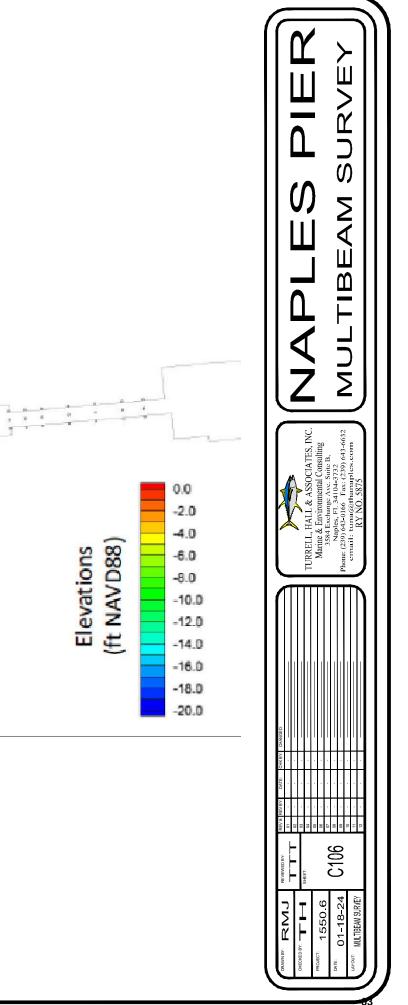


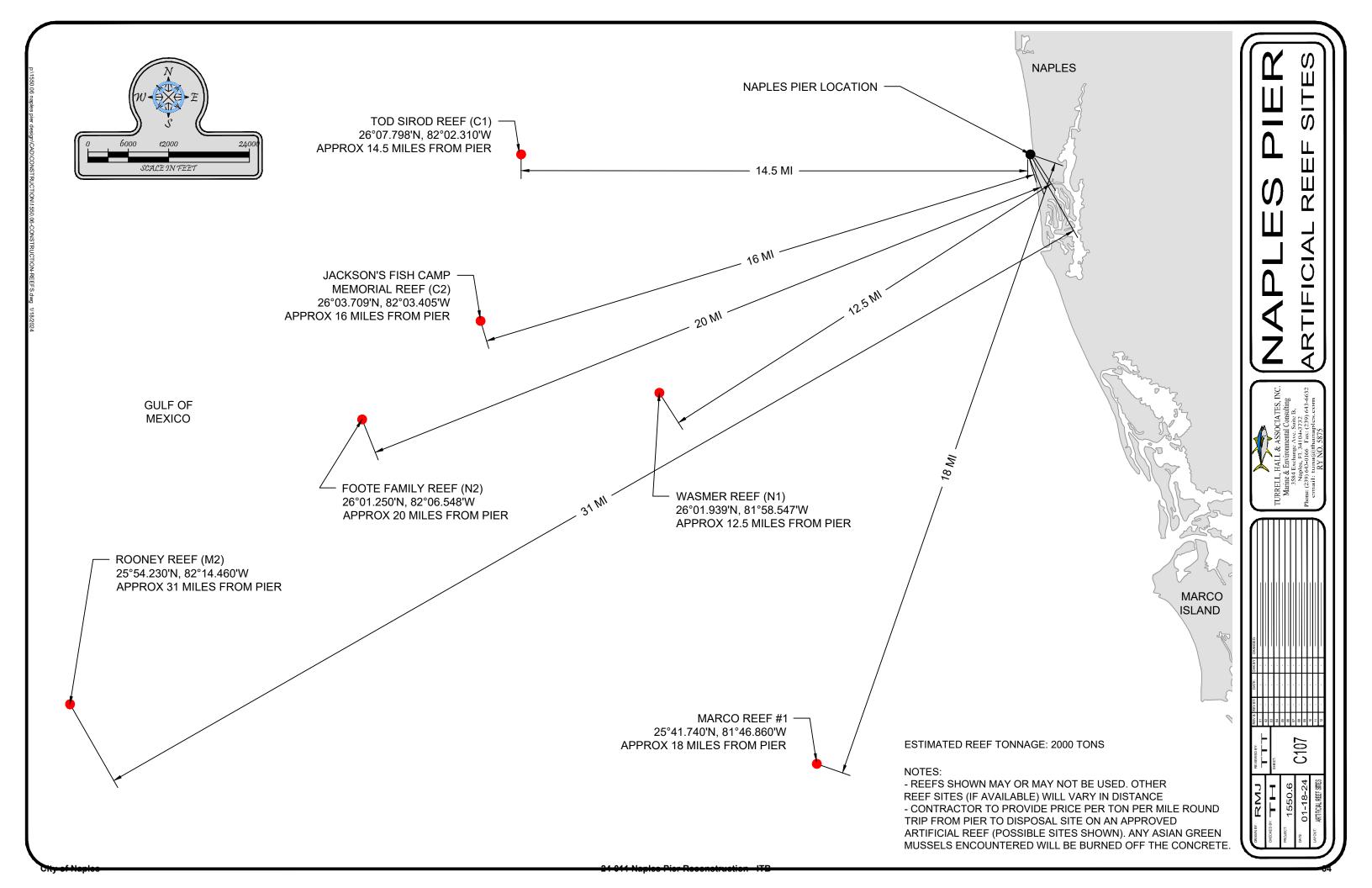


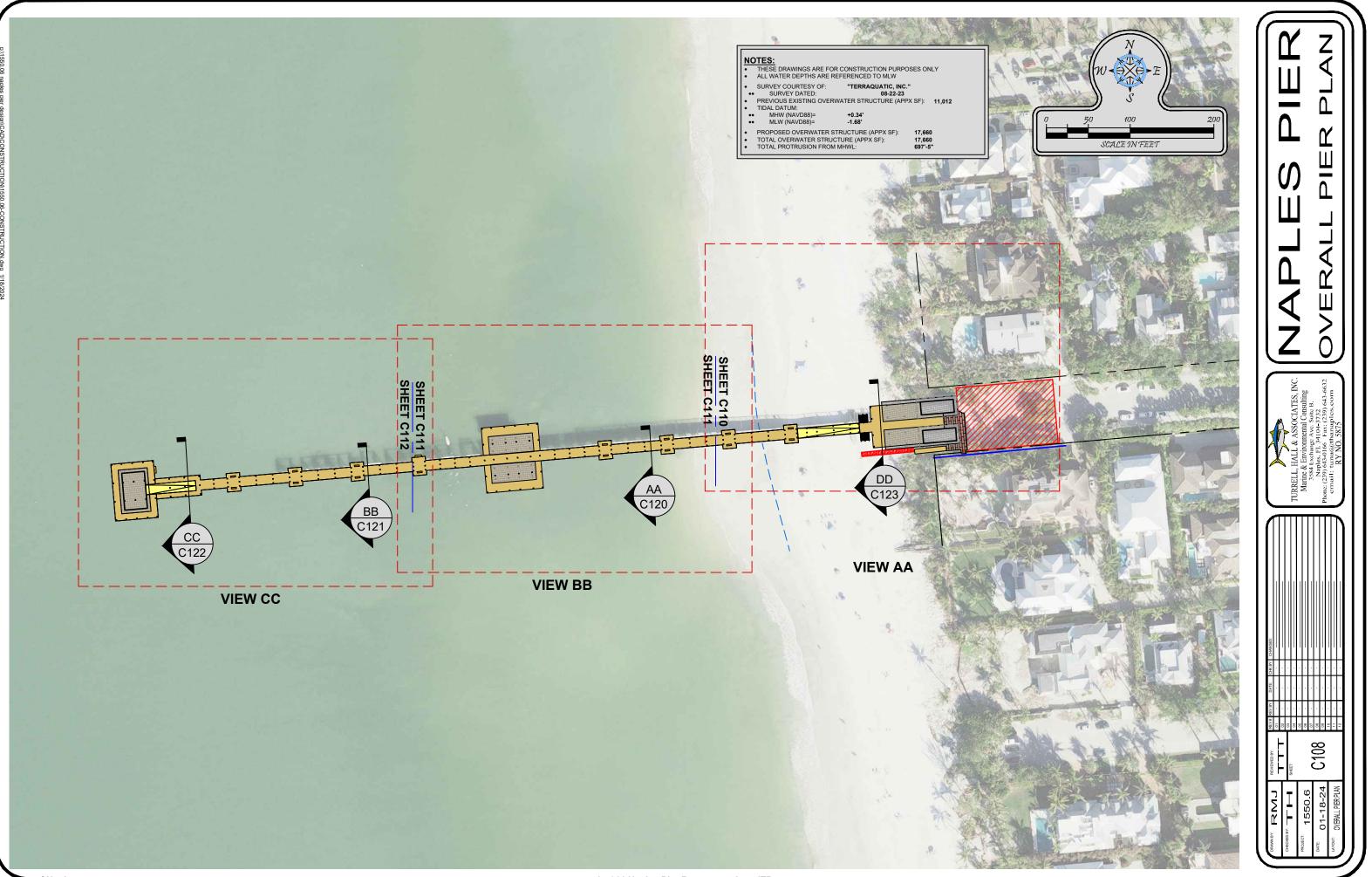








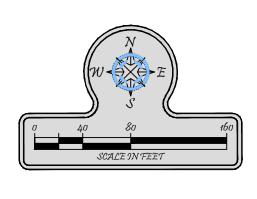


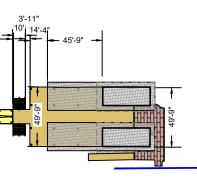


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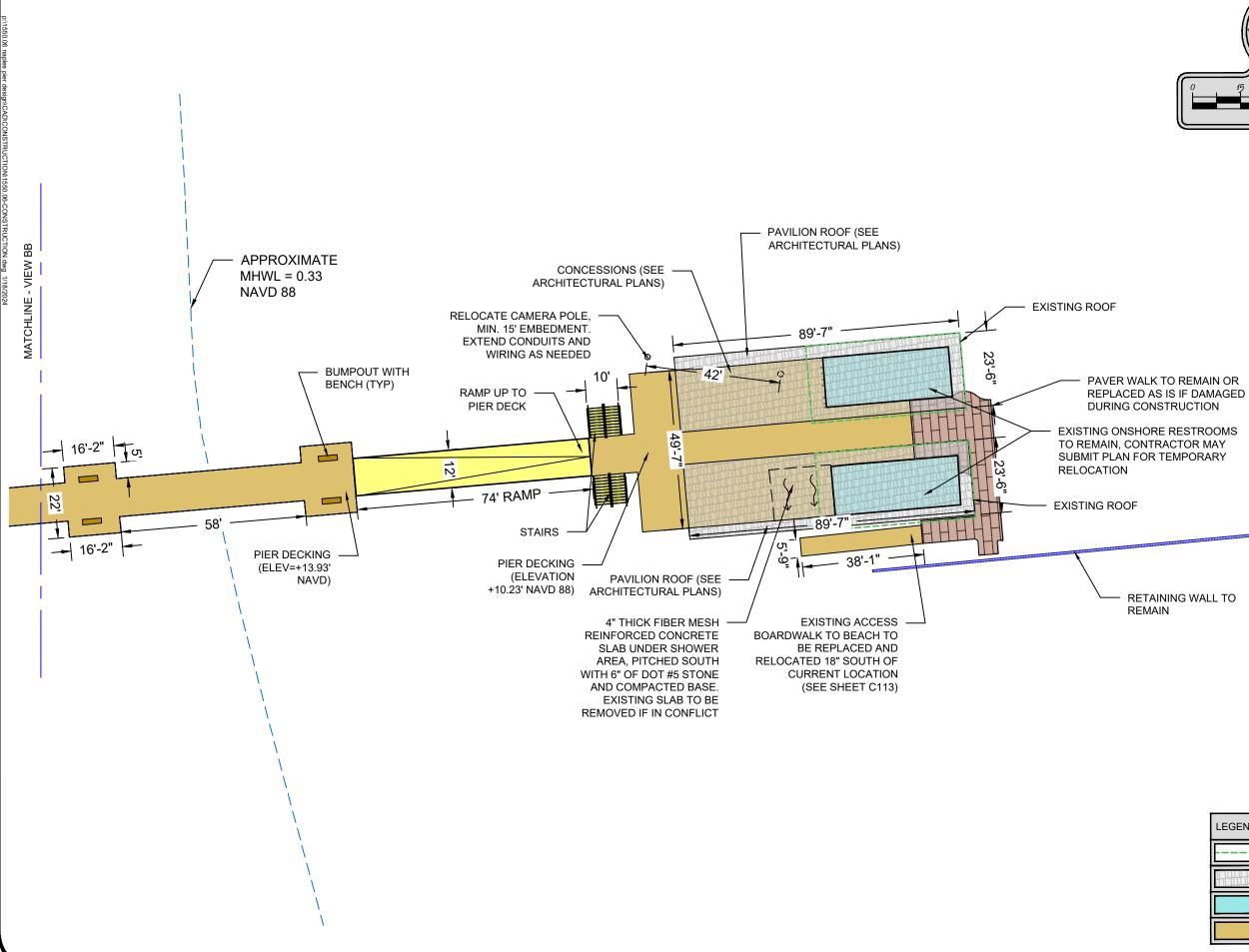
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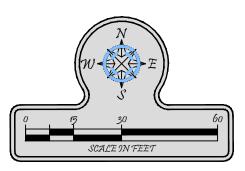
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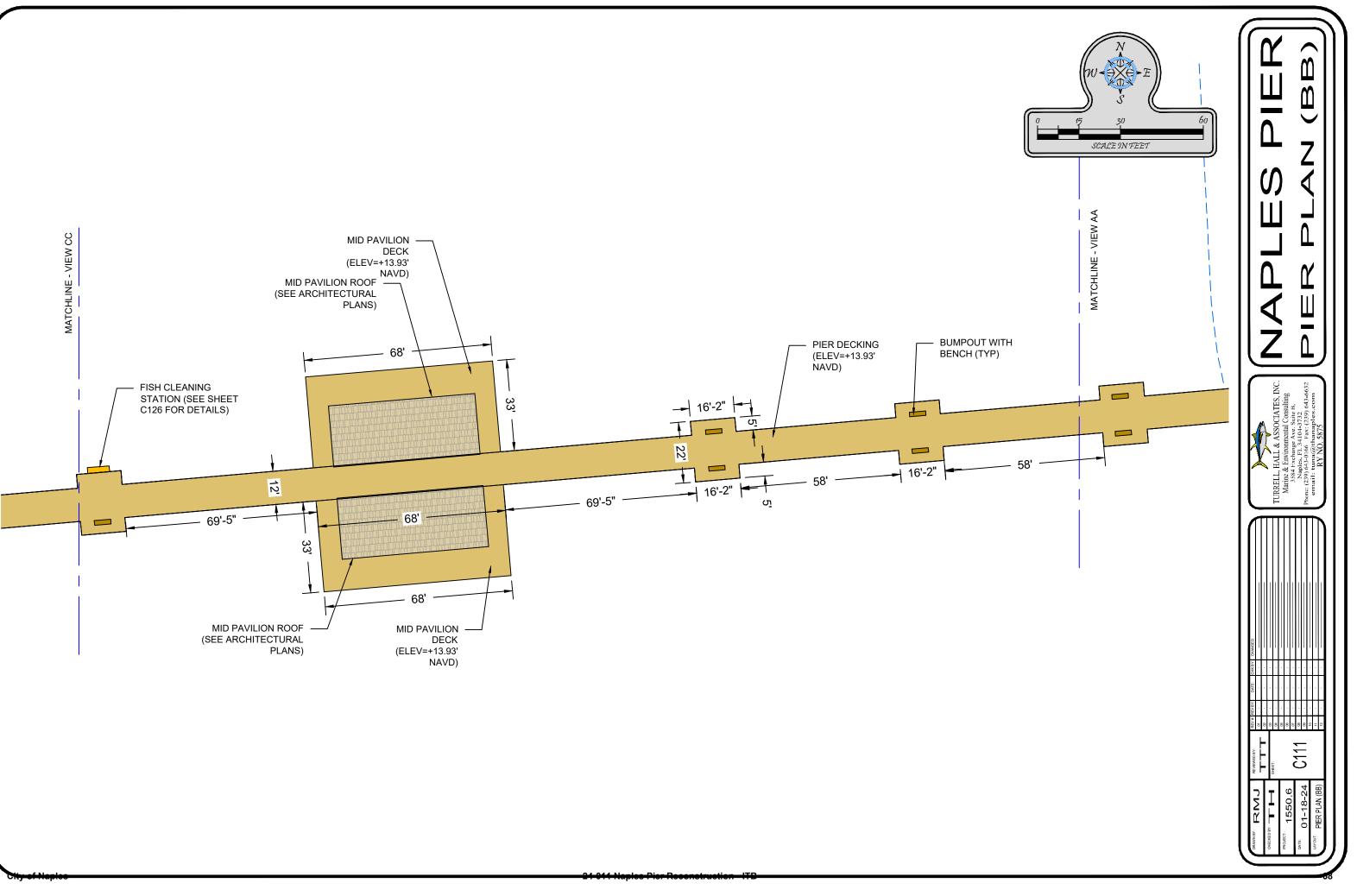


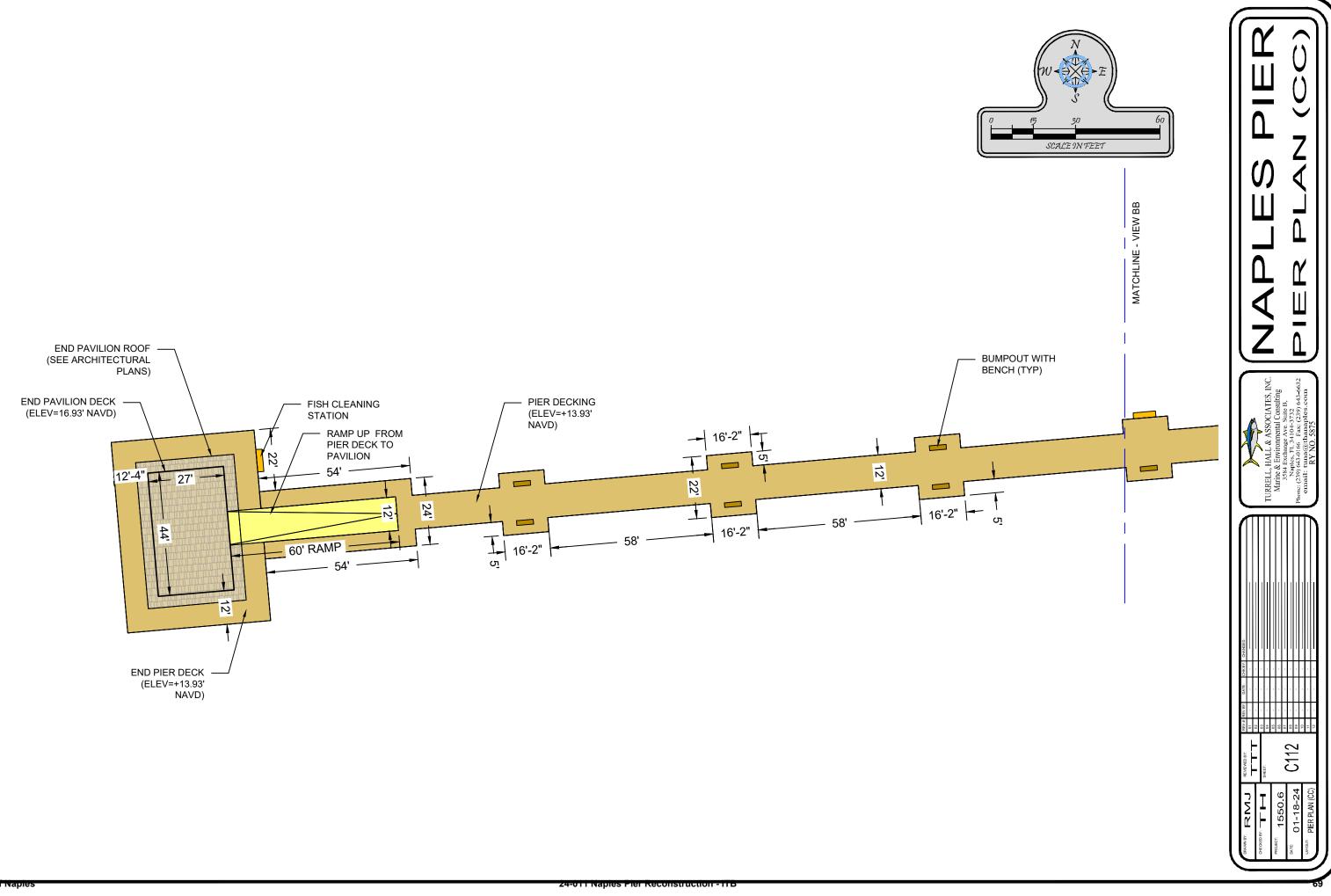


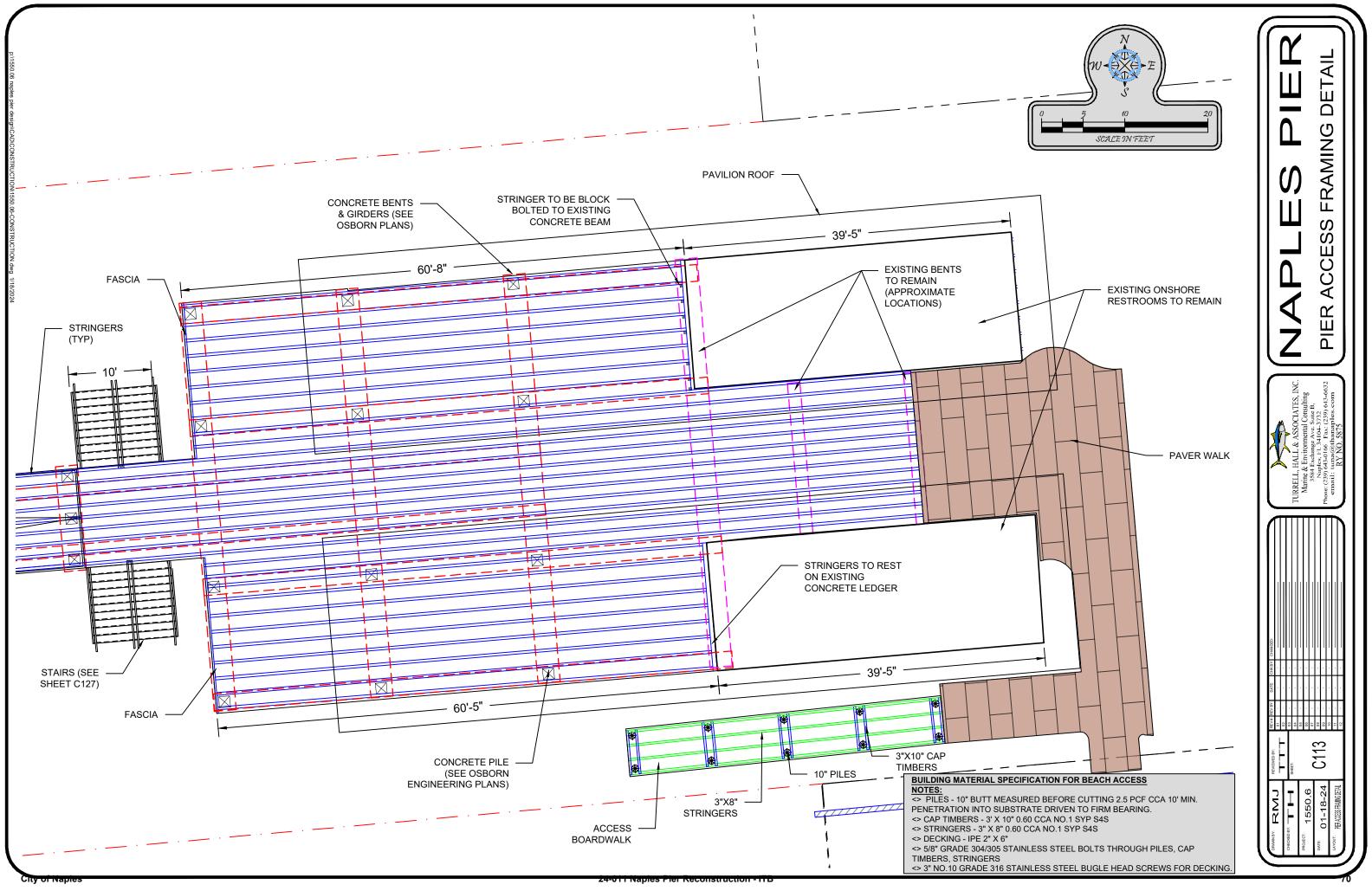
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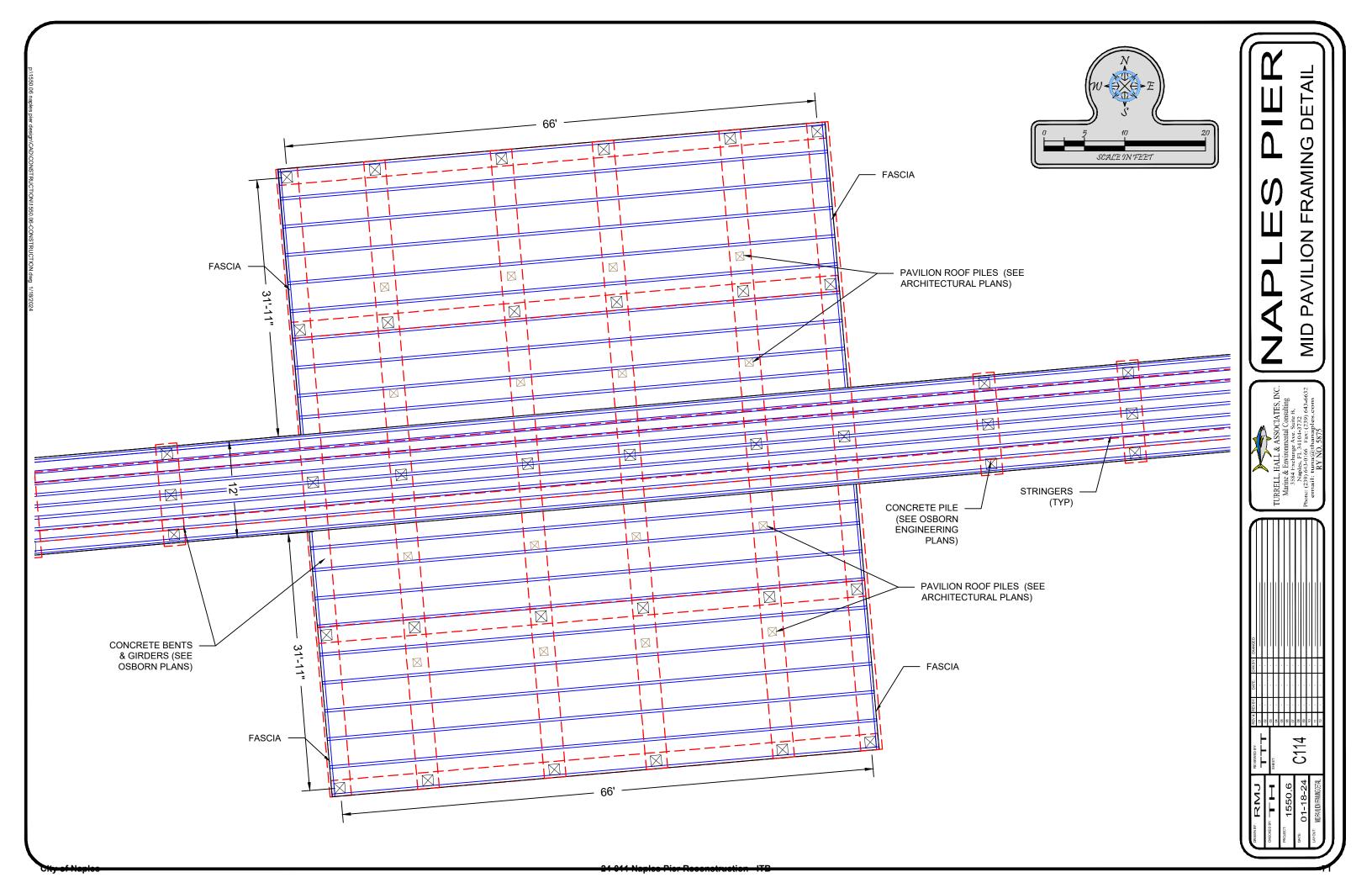
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EXISTING ROOF		
NEW ROOF		
EXISTING RESTROOMS		
NEW DECKING		



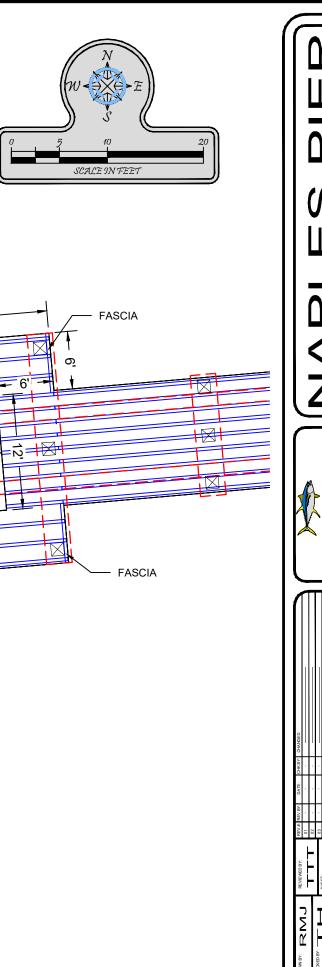






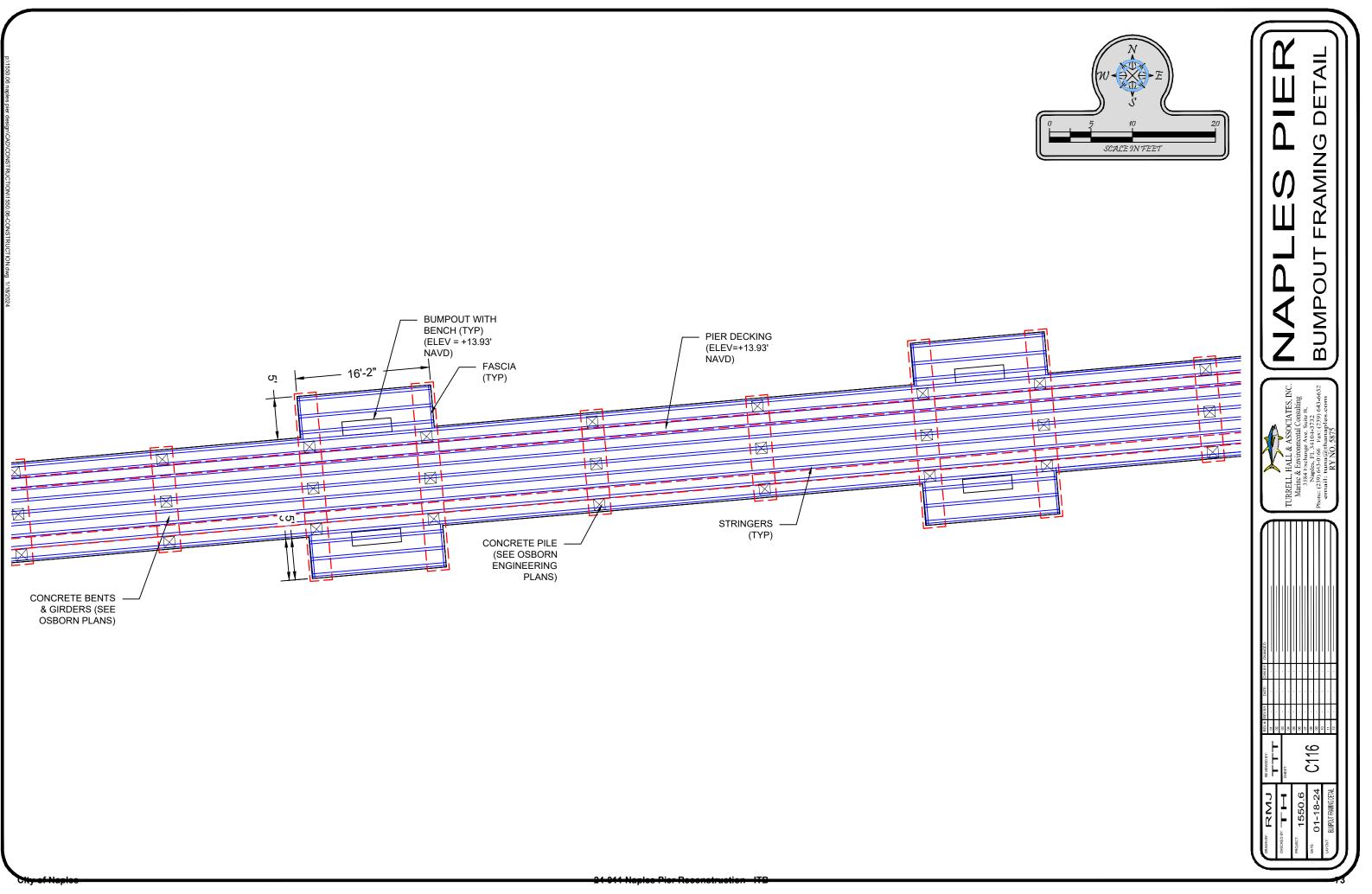


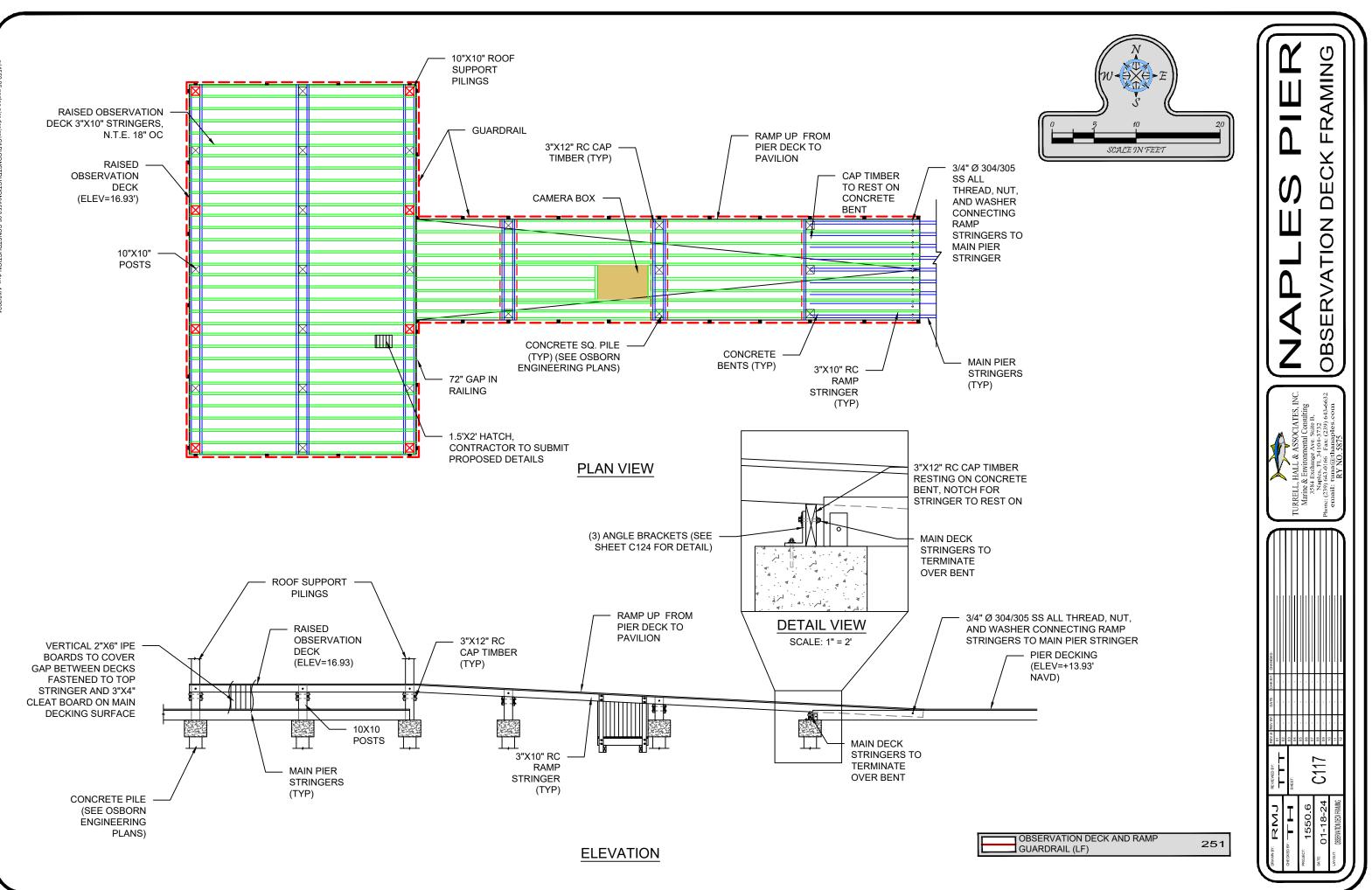
- FASCIA 49' FISH CLEANING TABLE FASCIA RAMP UP FROM PIER DECK TO 27 PAVILION TD 48' \boxtimes \boxtimes RAISED OBSERVATION DECK (SEE PAGE C117 FOR DETAILS) 65 44 -1-1" \boxtimes \boxtimes K CONCRETE BENTS -& GIRDERS (SEE OSBORN PLANS) CONCRETE PILE (SEE OSBORN ENGINEERING PLANS) - FASCIA \boxtimes STRINGERS (TYP)

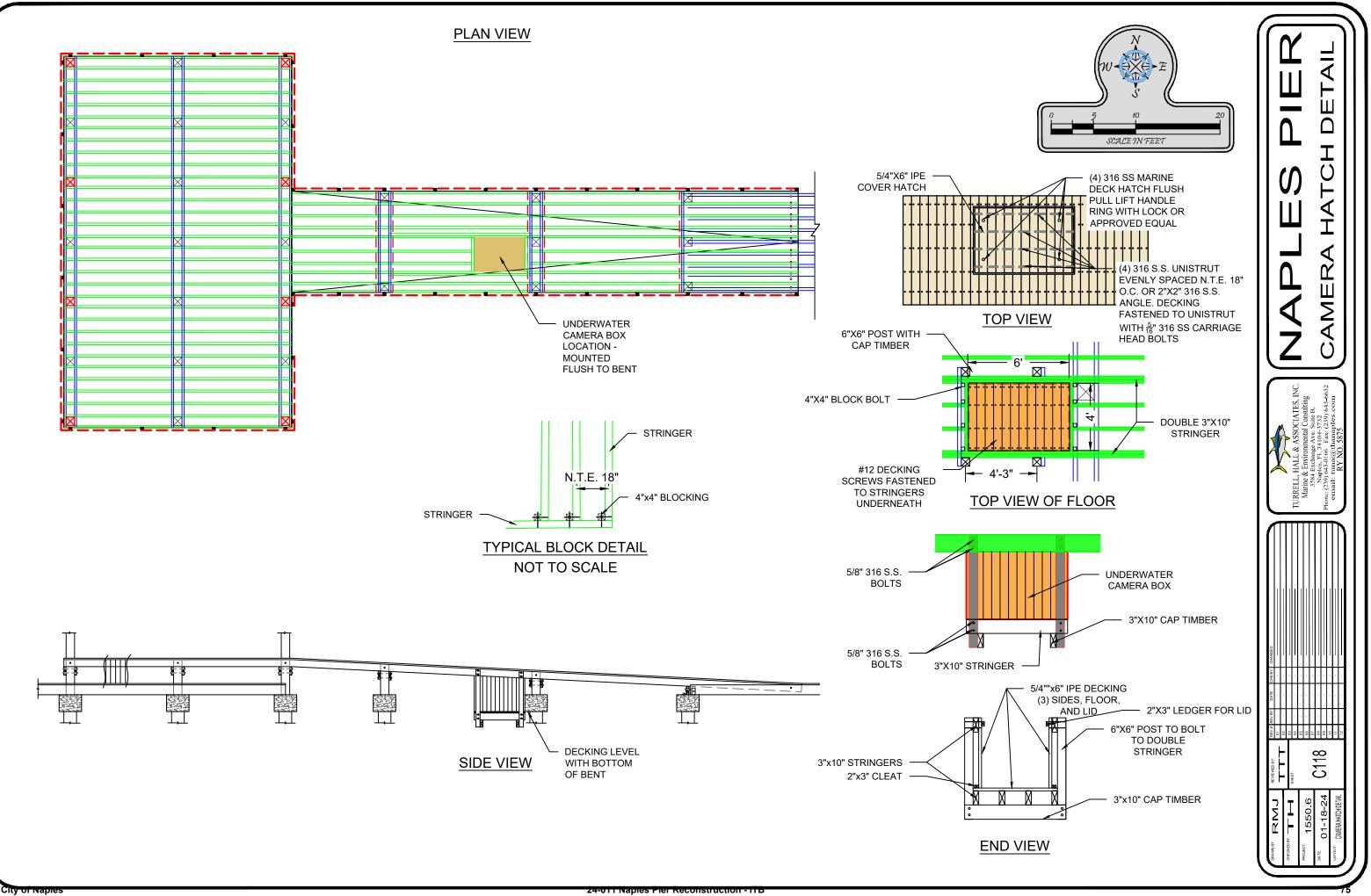


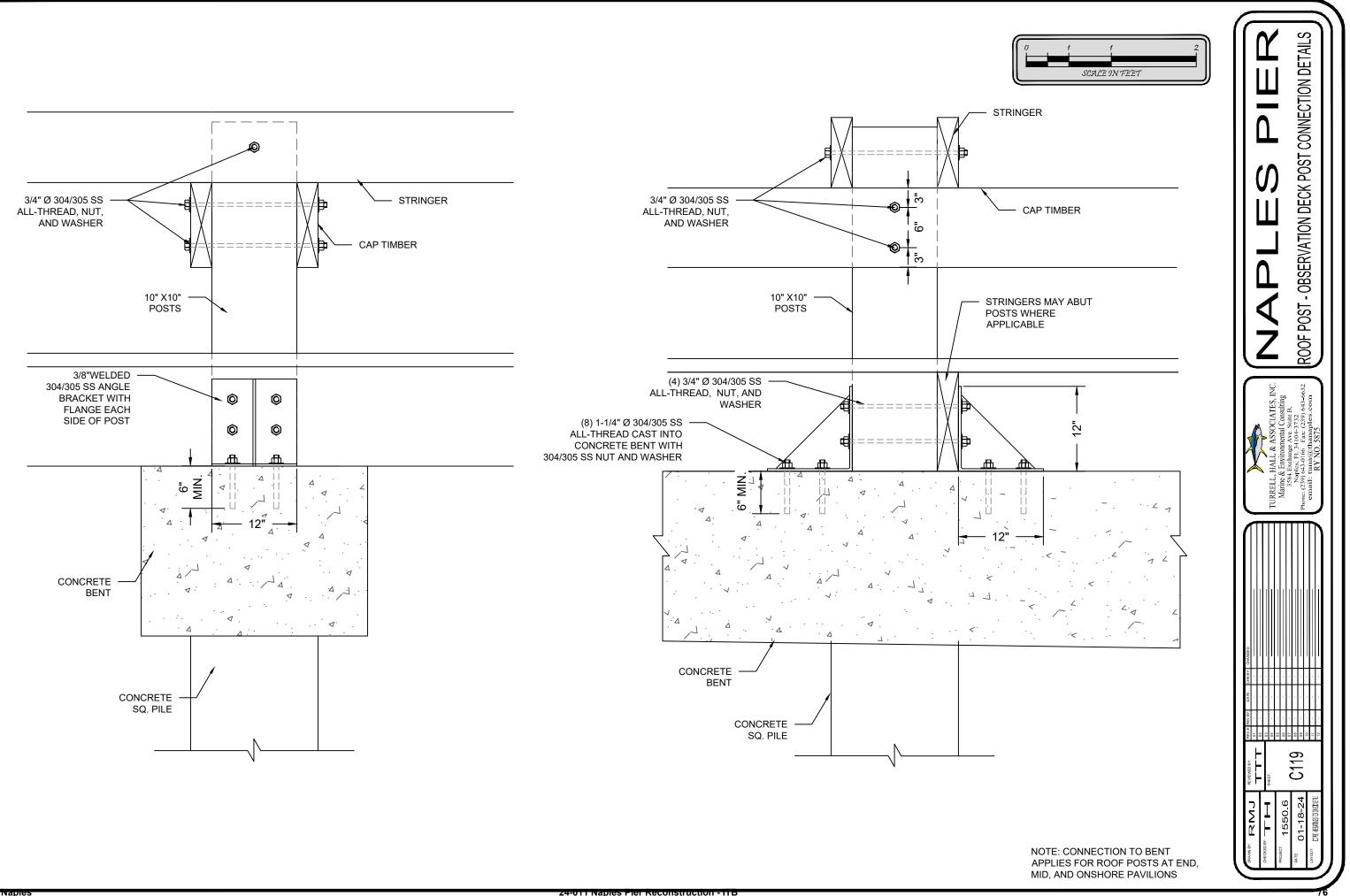


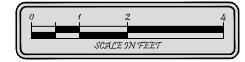
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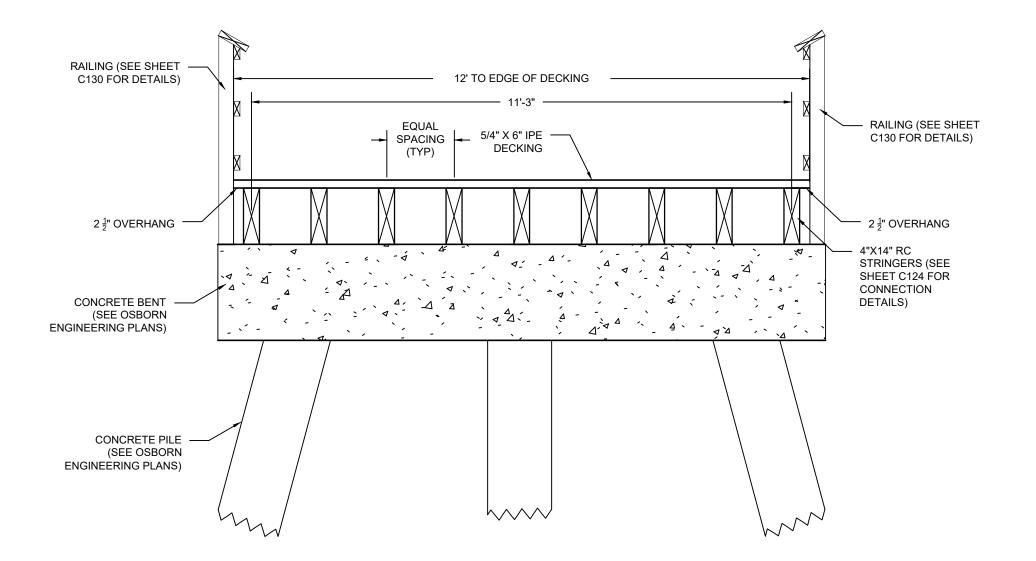




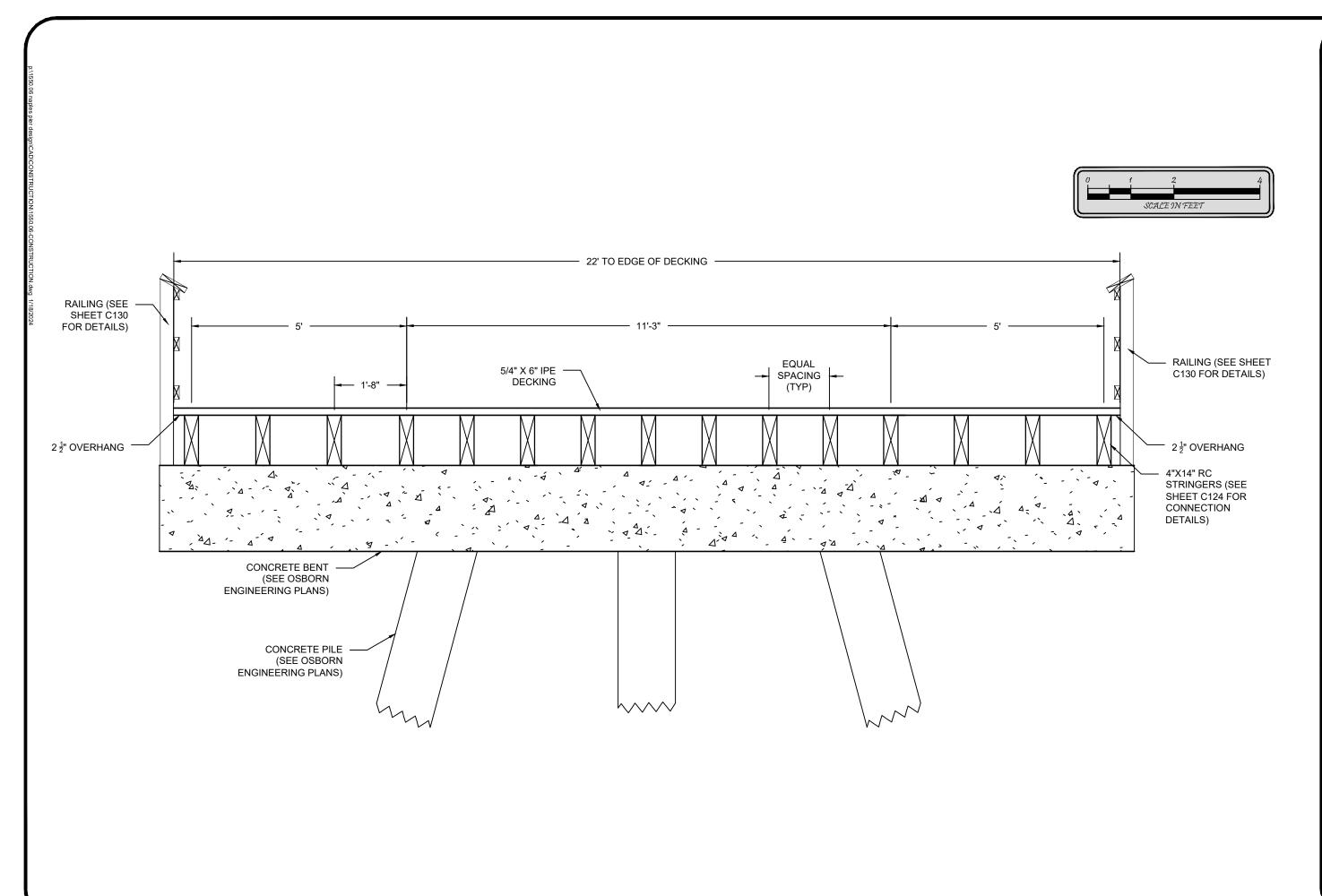








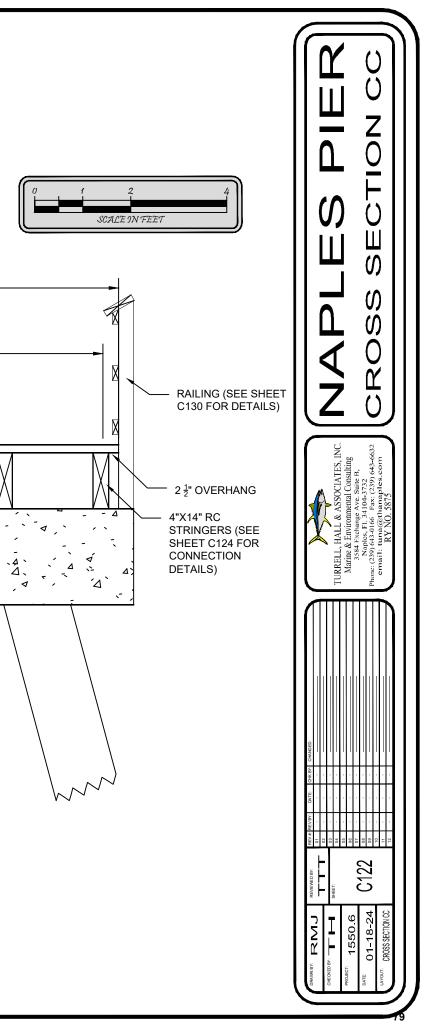




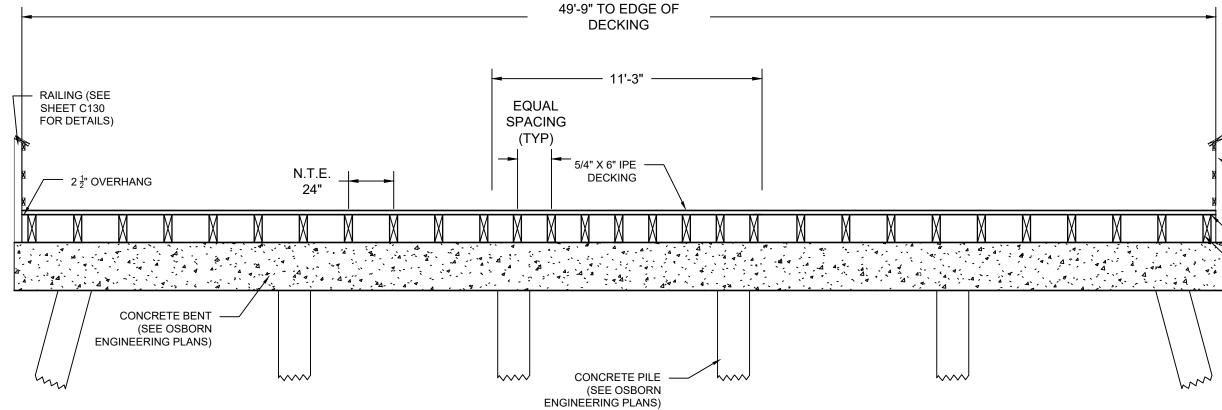


RAILING (SEE SHEET C130 FOR DETAILS) - 24' TO EDGE OF DECKING -- 11'-3" EQUAL SPACING 5/4" X 6" IPE DECKING ⁻ 2¹/₂" OVERHANG 2' — (TYP) - Á ⊿ √____ ۵ - _ ∆ ⊿ ∖ 1 Δ ۵ _ 4.> ΞÂ ٤ 、 . ` Z ∢ 4 ⊿ $\dot{\mathbf{A}}$ Δ ~ ۵, · 20-⊿ ~ <u>4</u> \ -1-۸À ۵ ∕⊅ CONCRETE BENT (SEE OSBORN ENGINEERING PLANS) CONCRETE PILE -(SEE OSBORN ENGINEERING PLANS) \sim MU,

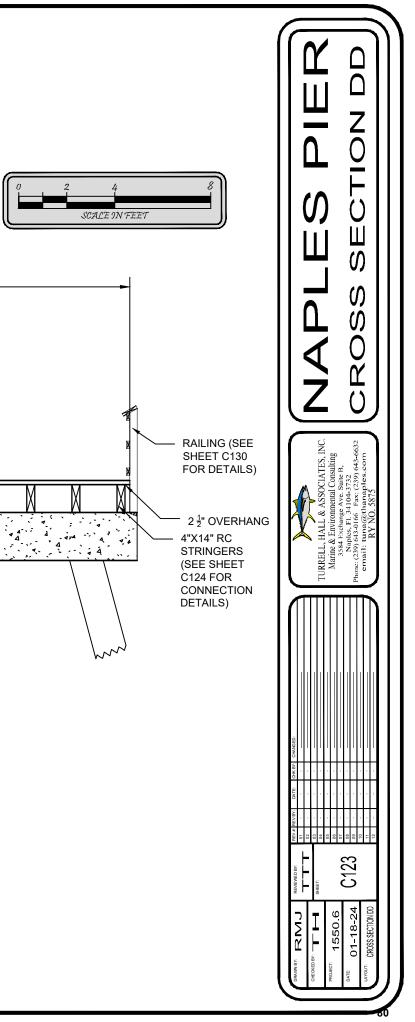
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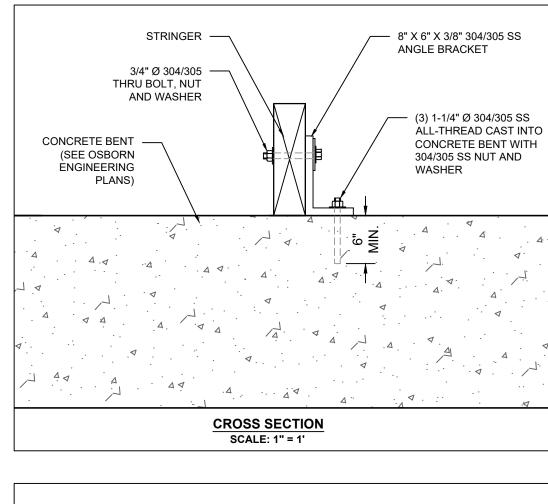


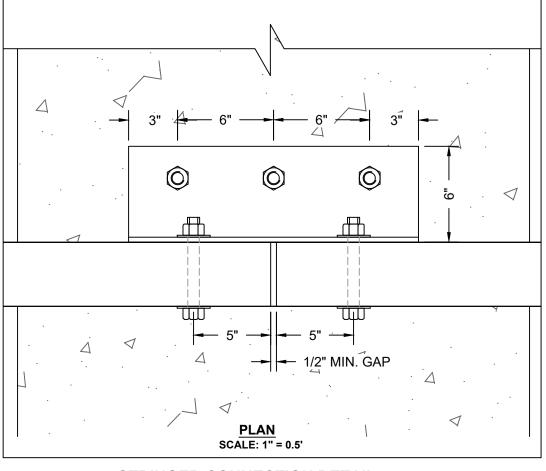




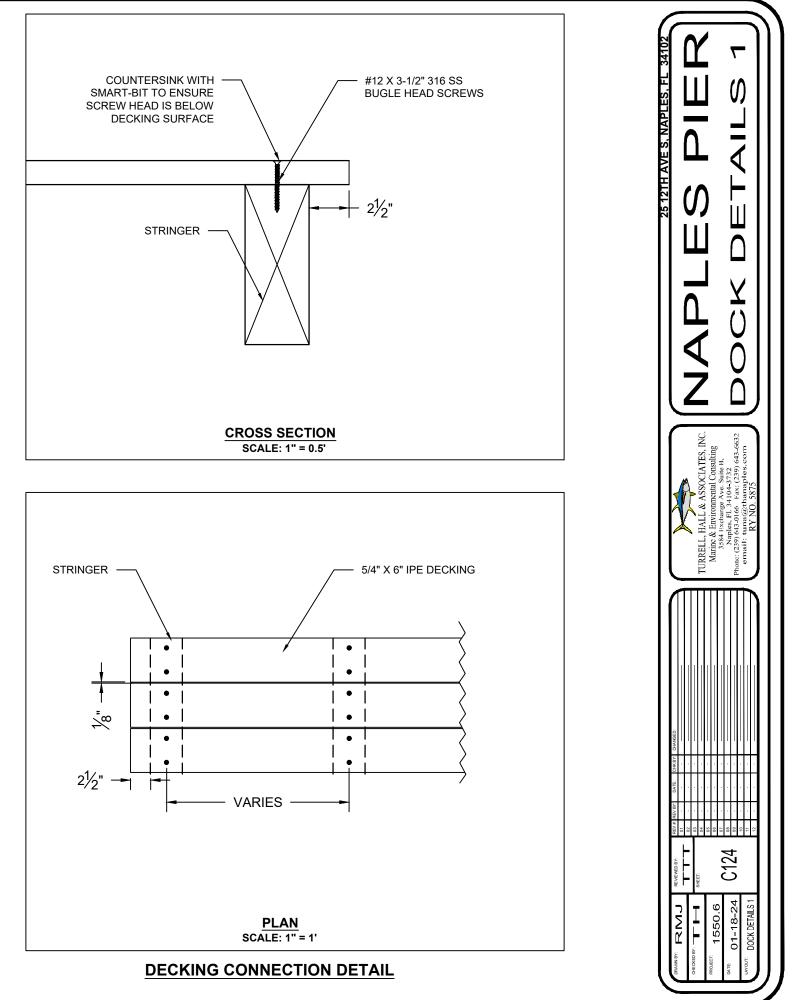
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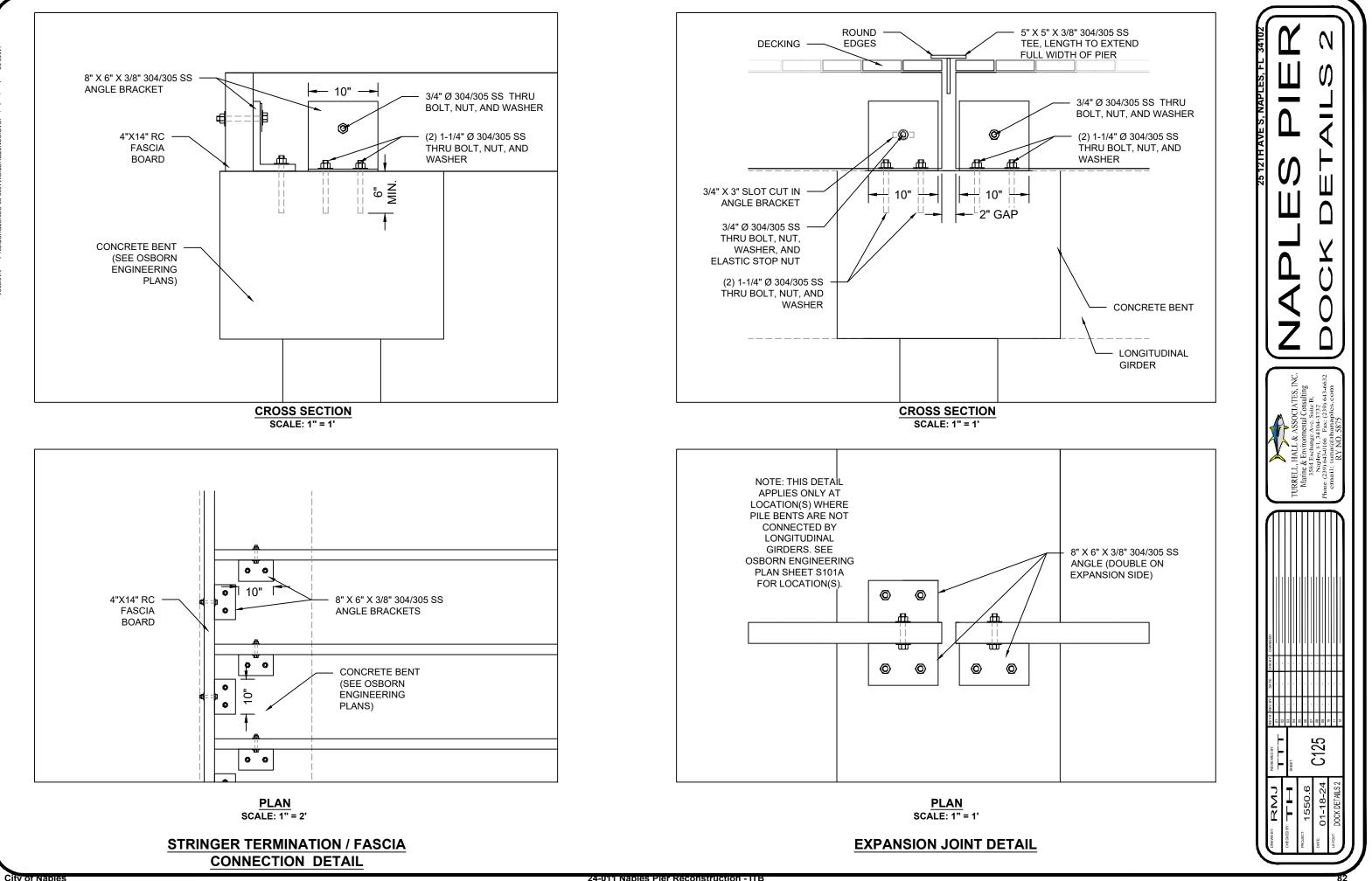


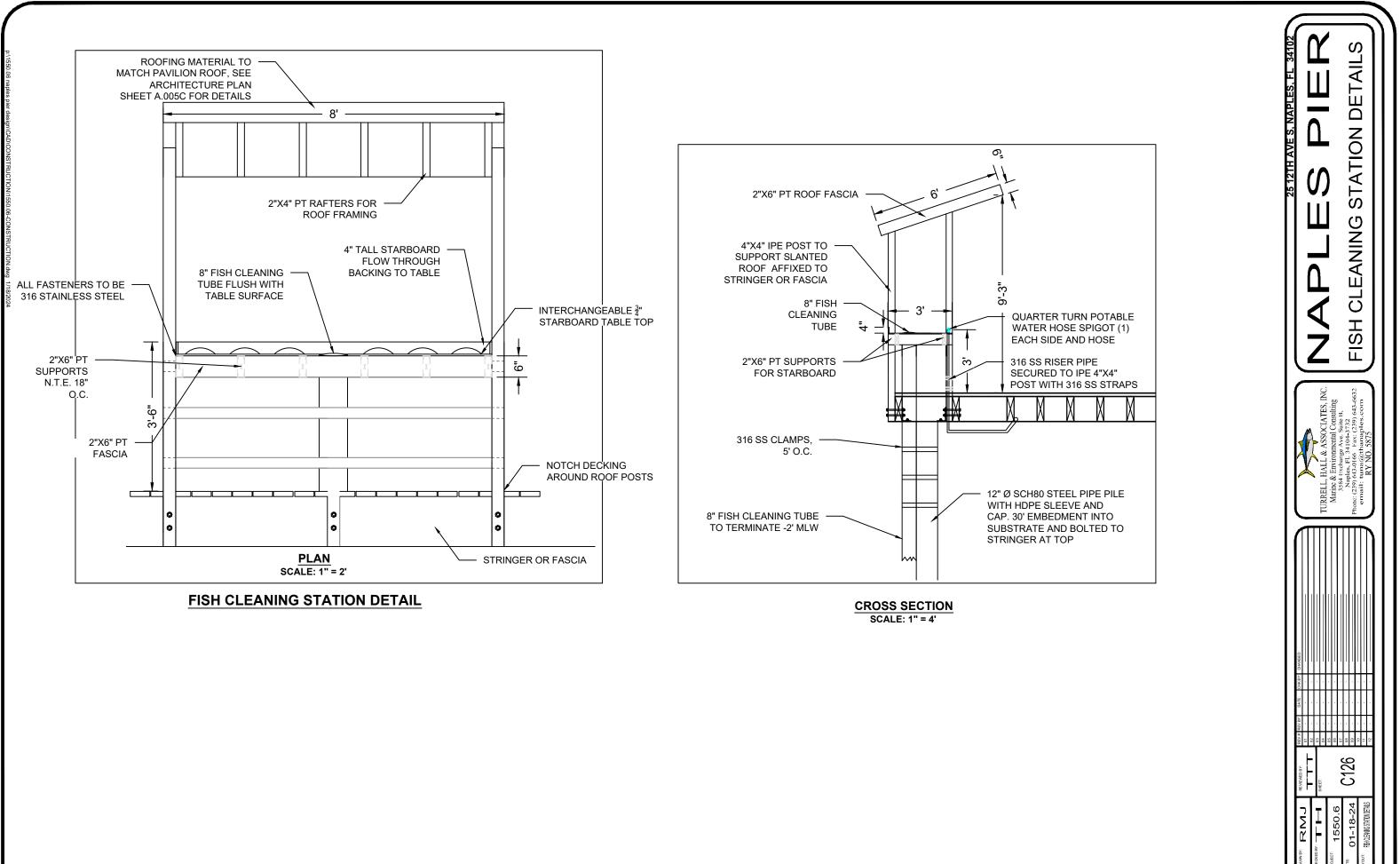


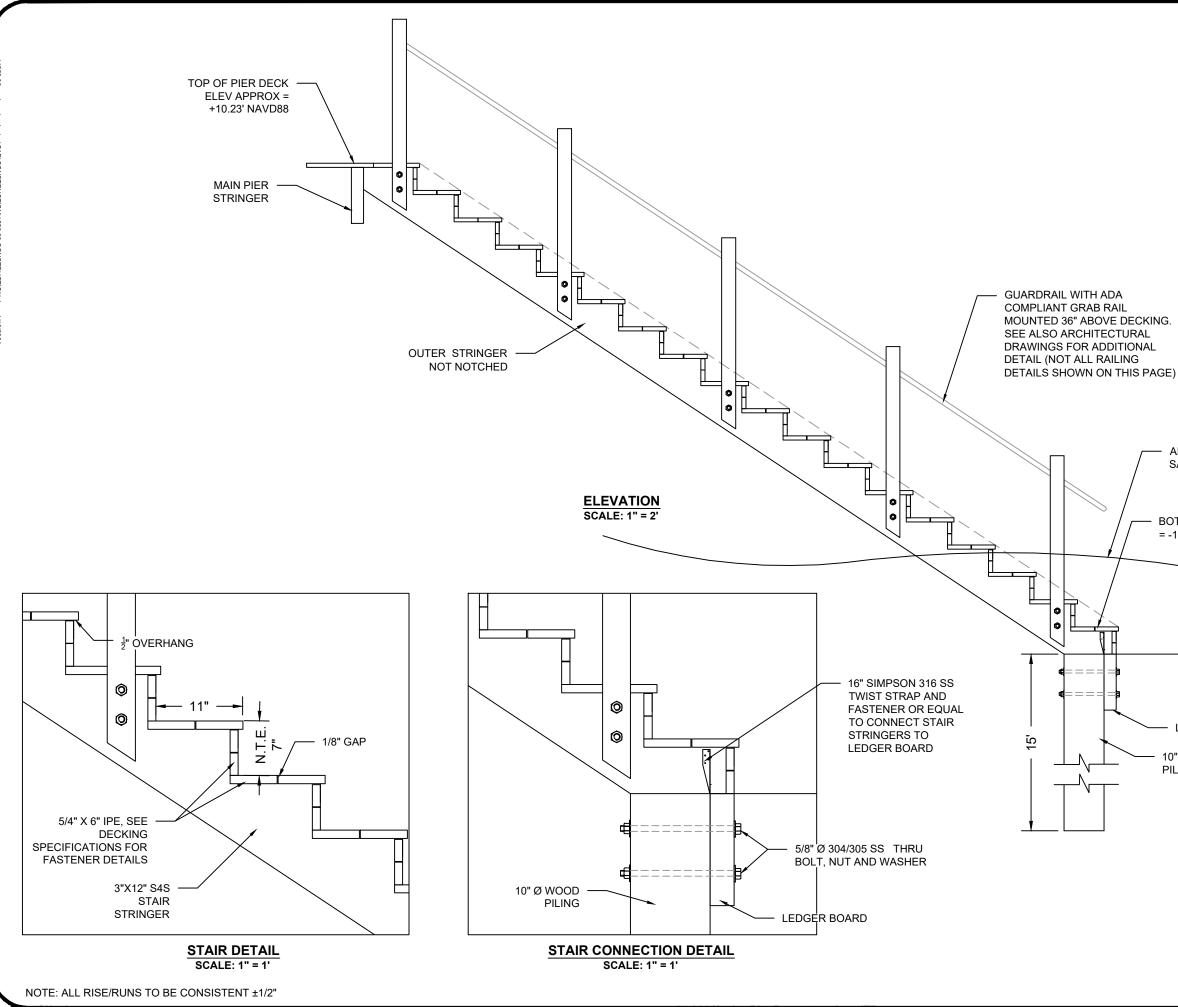




City or Napi







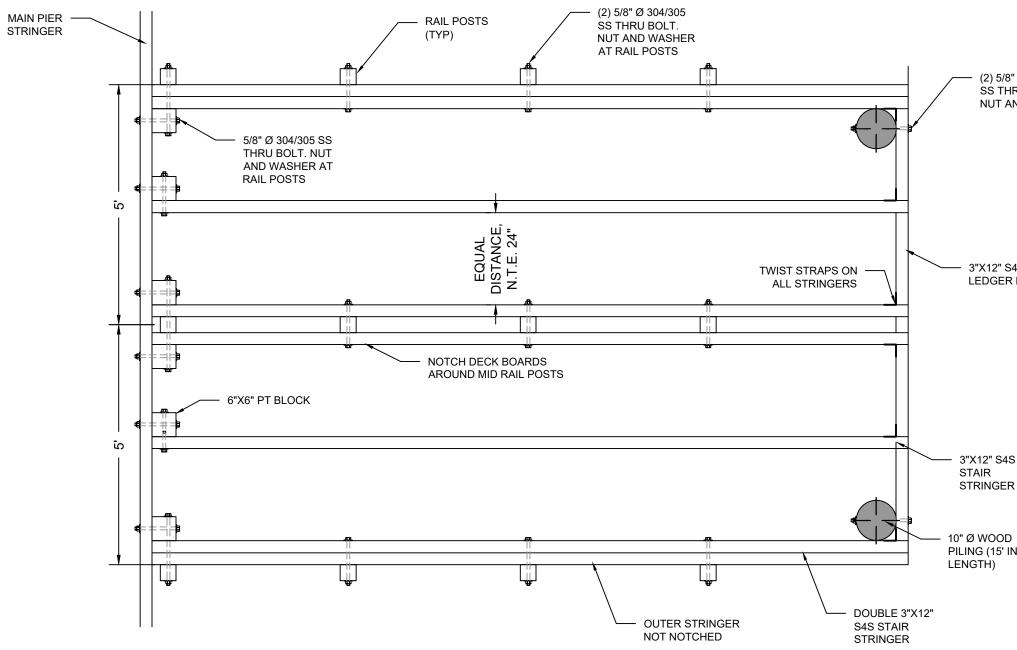


APPROXIMATE SAND ELEVATION

- BOTTOM STEP ELEV = -1.77' NAVD88

LEDGER BOARD

10" Ø WOOD PILING



PLAN SCALE: 1" = 2'

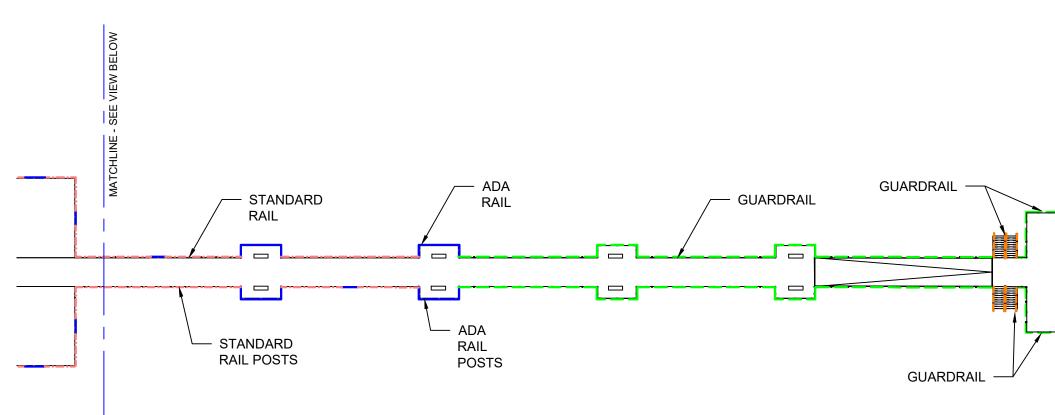
(2) 5/8" Ø 304/305 SS THRU BOLT. NUT AND WASHER

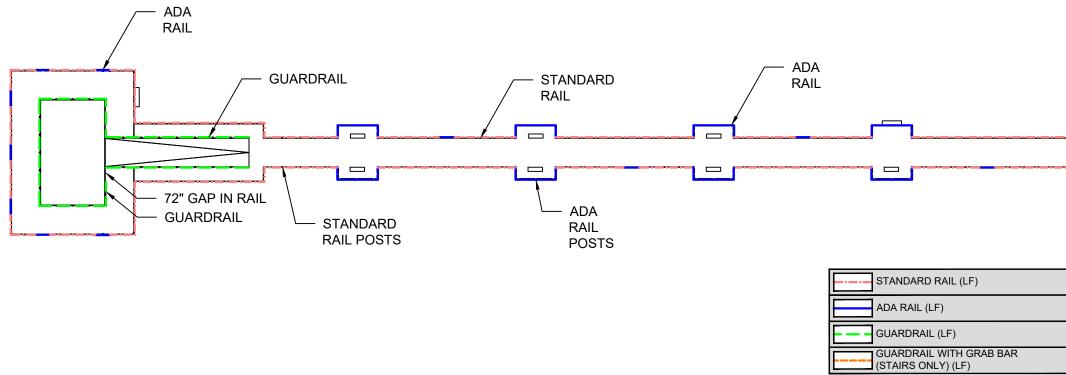
3"X12" S4S LEDGER BOARD

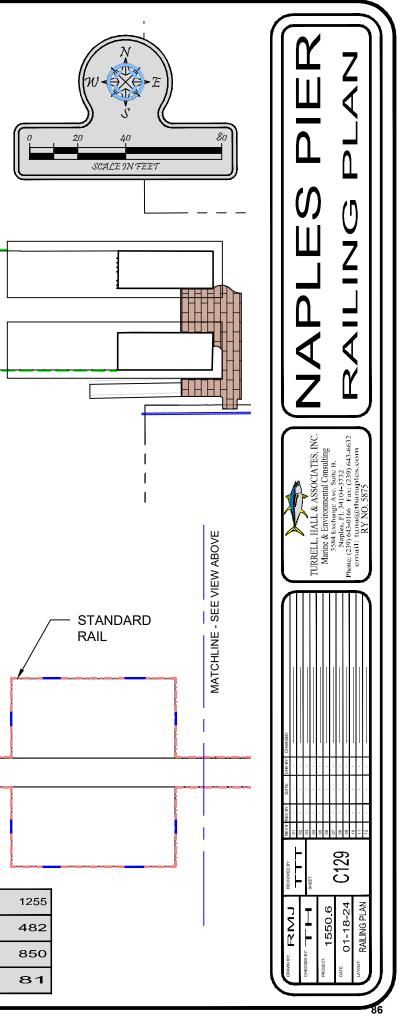
3"X12" S4S STRINGER

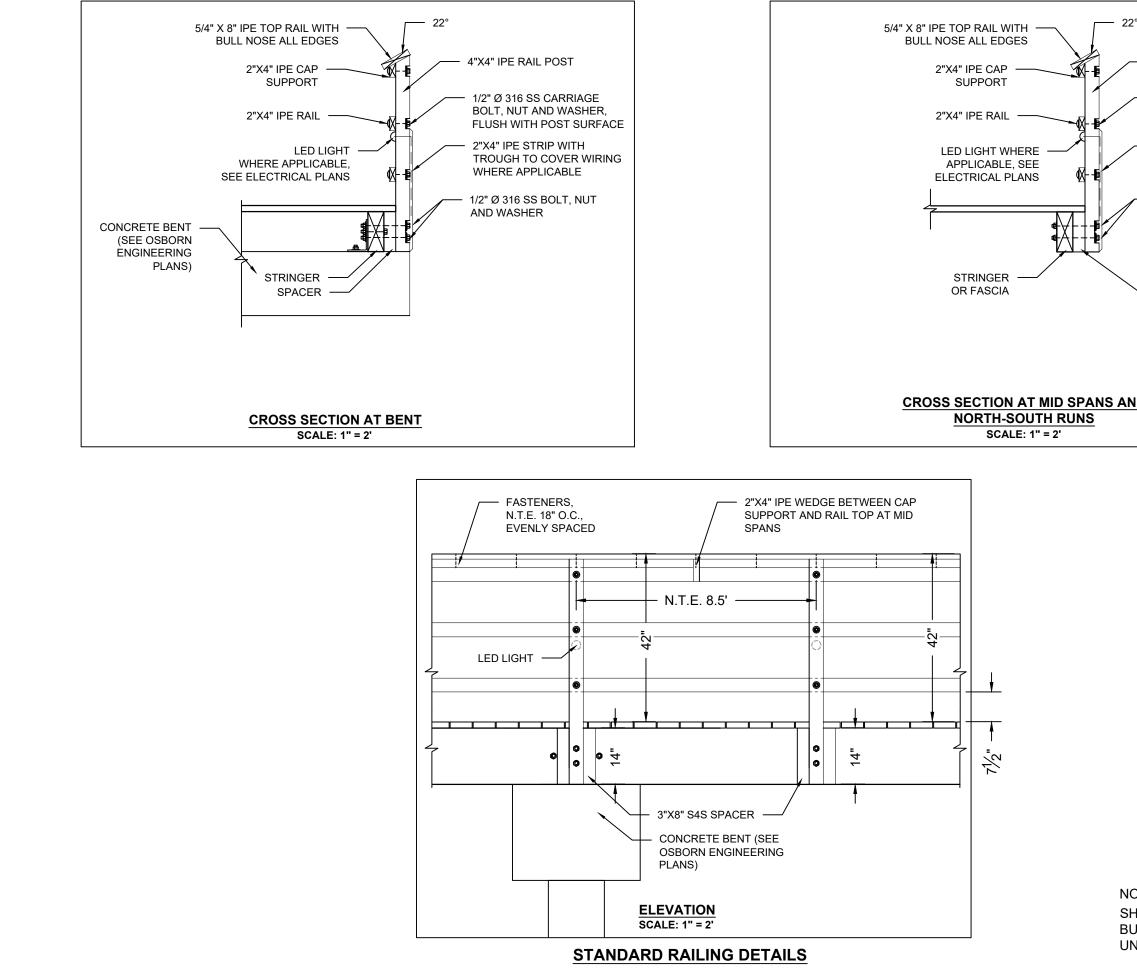
PILING (15' IN







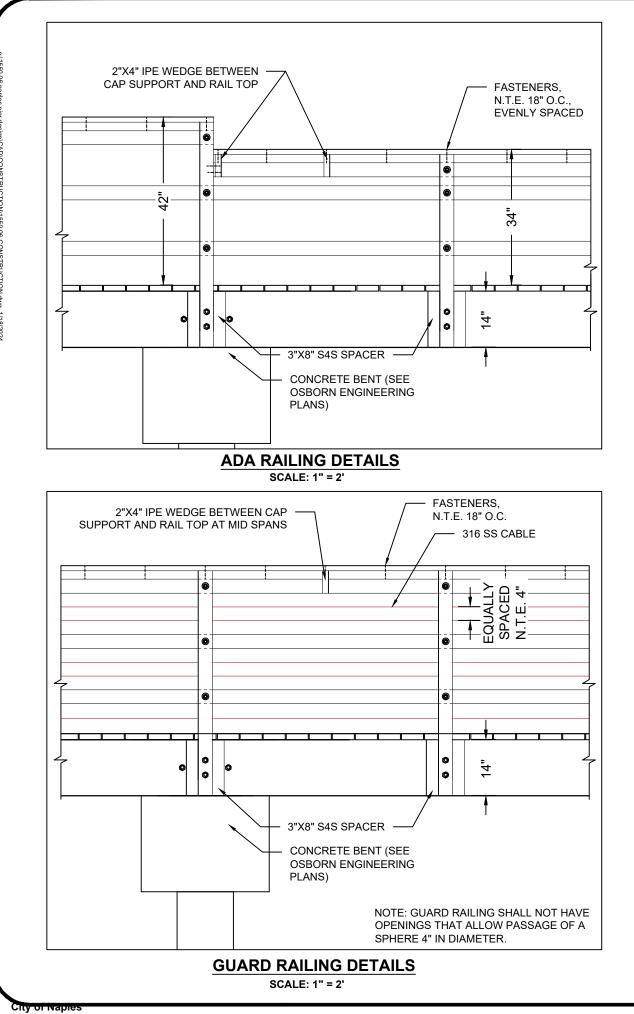


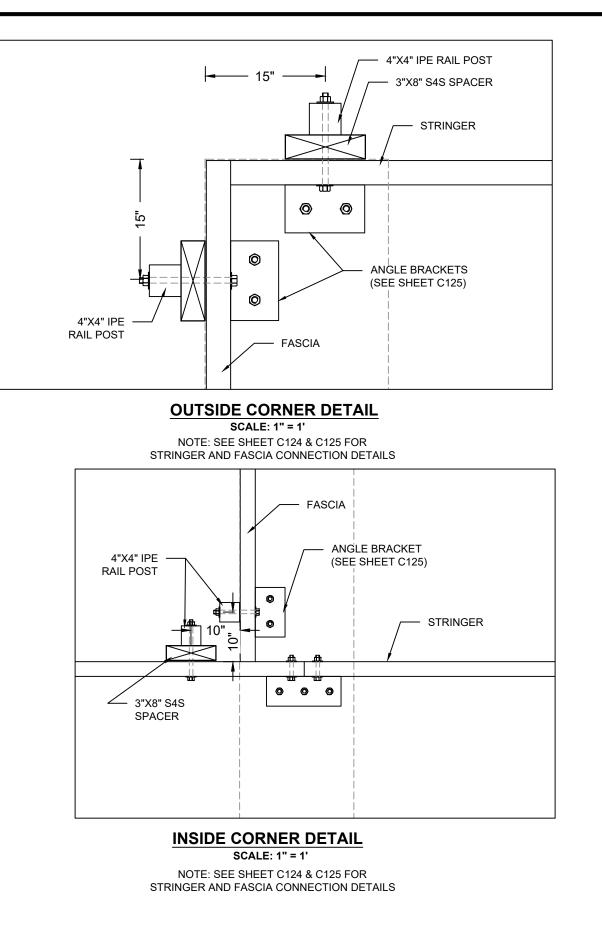


· 22°	
4"X4" IPE RAIL POST	≊ ≝ 8
1/2" Ø 316 SS CARRIAGE BOLT, NUT AND WASHER, FLUSH WITH POST SURFACE	
2"X4" IPE STRIP WITH TROUGH TO COVER WIRING WHERE APPLICABLE	
1/2" Ø 316 SS BOLT, NUT AND WASHER	Ш П Ш
SPACER (NOT NEEDED WHERE POST IS AFFIXED TO FASCIA BOARD)	NAPL
AND	es, INC. ting
	LL, HALL & ASSOCIATE inc & Environmental Consul inc Bis, FL 34104-3732
	TURRELL, HALL & ASSO Marine & Environmental 3584 Firstenge Ave 5 Naples: Firstenge Ave 5
	Chempy OwnodeD
	ATE:

NOTE: RAILING FASTENERS SHALL BE #12 X 3 ¹/₂" 316 SS BUGLE HEAD SCREWS UNLESS OTHERWISE NOTED.



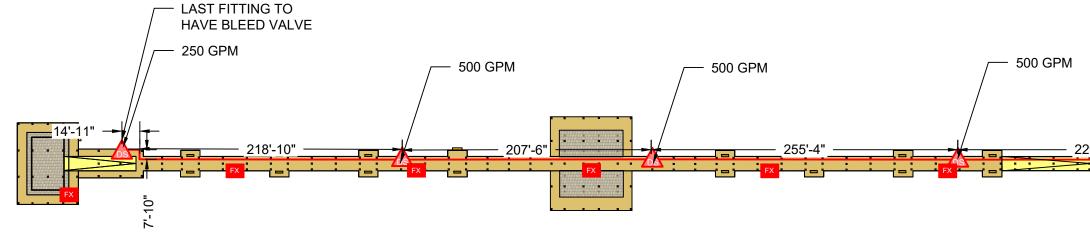




NOTE: RAILING FASTENERS SHALL BE #12 X $3\frac{1}{2}$ " 316 SS BUGLE HEAD SCREWS UNLESS OTHERWISE NOTED. CONTRACTOR TO SUBMIT PROPOSED WIRE RAIL SYSTEM INCLUDING CORNER DETAILS



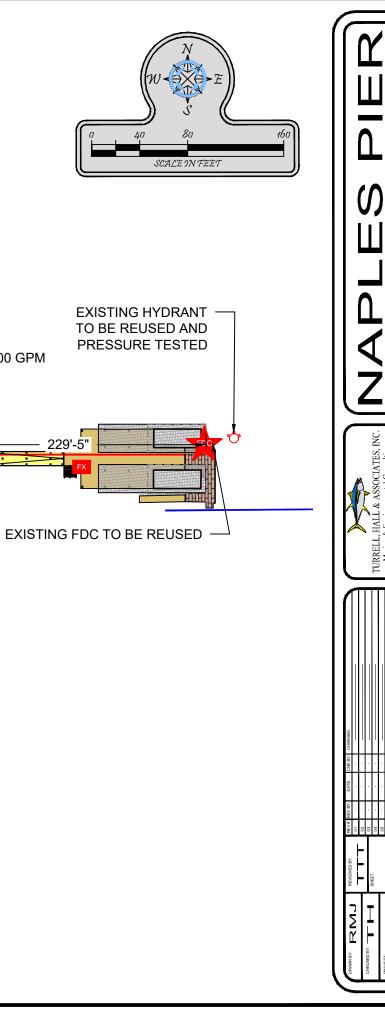




LEG	LEGEND						
FDC	FIRE DEPARTMENT CONNECTION						
FX	10LB SS FIRE EXTINGUISHER MOUNTED ON RAILING N.T.E. 75' WALKING DISTANCE EACH WAY, CATO FIRE EXTINGUISHER CABINET OR APPROVED EQUIVALENT						
	DRY STAND PIPE						
Ċ	EXISTING HYDRANT						
	4" 316 SS FIRE LINE						

FIRE PIPING SPECIFICATIONS:

- IN THE OT ENTERTICATION. INSTALLATION OF ALL PIPING SHALL BE PER THE LATEST EDITION ACCEPTED BY THE LOCAL AHJ OF THE FLORIDA BUILDING CODE PLUMBING EDITION, NFPA 303, NFPA 14. 1
- ALL PIPING SHALL BE 316 STAINLESS STEEL AND ALL FITTINGS SHALL BE CLAMPED. 2
- ALL PIPING SHALL BE PRESSURE TESTED AFTER CONNECTING APPLICABLE VALVES. 3. PIPING SHALL BE TESTED TO AT LEAST 200 PSIG AND PRESSURE SHALL BE MAINTAINED FOR A MINIMUM OF 2 HRS.
- 4. ALL PIPE HANGERS, STRAPS, NUTS, BOLTS, ANGLE SUPPORTS, ETC. SHALL BE STAINLESS
- STEEL.
- ALL 90 DEGREE BENDS SHALL BE LONG RADIUS. CONTRACTOR SHALL SUBMIT ALL MATERIALS TO EOR AND FIRE DEPARTMENT PRIOR 5. 6. TO COMMENCEMENT FOR NECESSARY APPROVALS.
- ALL UNDERGROUND PIPING TO HAVE A FIRE INSPECTION. 7.
- ALL TESTING SHOULD OCCUR BEFORE DECKING. 8
- ALL PIPING SECTIONS TO BE COUPLED WITH 316SS FLEXIBLE COUPLINGS. 9.
- CONTRACTOR RESPONSIBLE TO HAVE PROPERLY LICENSED FIRE CONTRACTOR INSTALL 10. AND TEST SYSTEM.
- 11. CONTRACTOR RESPONSIBLE TO SUPPLY AND INSTALL ALL NECESSARY CORROSION RESISTANT SIGNAGE.
- 12. CONTRACTOR TO CONDUCT FLOW TESTING AT ALL HOSE CONNECTIONS.





Dry Standpipe Hydraulic Calculations

Design Criteria:

NFPA 14 2019: Standard for the installation of standpipe and hose systems 13.5.4.2 Standpipe systems shall be designed to provide 100 psi at the most remote outlet with the calculations terminating at the fire department connection.

13.5.5.1 The minimum flow rate for the hydraulically most remote standpipe shall be 500gpm, through the two most remote 2-1/2" outlets, and the calculation procedure shall be in accordance with 13.5.6.

13.5.5.2 Where the system supplies three or more hose connections, the minimum flow rate for the hydraulically most demanding horizontal standpipe shall be 750 GPM, and the calculation procedure shall be in accordance with 13.5.6.1.

13.5.6.1 Where a standpipe system supplies three or more hose connections on any pier, dock or similar structure hydraulic calculations and pipe sizes for each standpipe shall be based on providing 250gpm at the three hydraulically most remote hose connections on the standpipe and the most remove outlet of each other standpipes at the minimum residual pressure required by 13.5.4.

250 GPM @ 100 PSI Residual at most remote valve

Naj	ples	Pier	

Most Remote Valve	
GPM	250
Result overall PSI (drop)	24.0749496

SS							
Nominal Diameter (in)	Diameter (in)	C(Coeff).)	Length(ft)	PSI (drop)			
2-1/2	2.5	150	75	10.041108			
3	3	150	0	0			
4	4	150	1034	14.033842			
HDPE							
Nominal Diameter (in)	Diameter (in)	C(Coeff).)	Length(ft)	PSI (drop)			
2	1.92	150	0	0			
3	2.83	150	0	0			
4	3.633	150	0	0			
6	5.349	150	0	0			
G	GPM = Gallons per minute						
PS	l = Pounds per	square inch					
Bas	ed on Hazen-Wil	liams Formula					

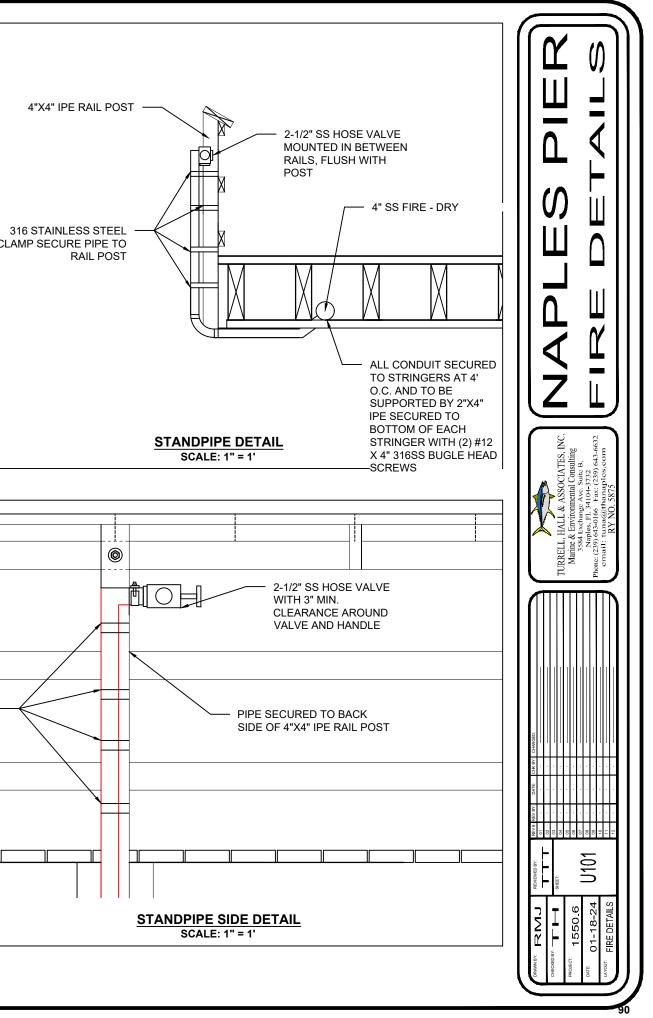
Naples Pier 2ND Most Remote Valve GPM 500 Result overall PSI (drop) 74.3624092 SS Nominal Diameter (in) Diameter (in) C(Coeff).) Length(ft) PSI (drop) 75 36.198212 2 - 1/2150 2.5 150 150 780 38.164198 HDPE Nominal Diameter (in) Diameter (in) C(Coeff).) Length(ft) PSI (drop) 1.92 150 2.83 150 3.633 150 5.349 150 GPM = Gallons per minute PSI = Pounds per square inch Based on Hazen-Williams Formula

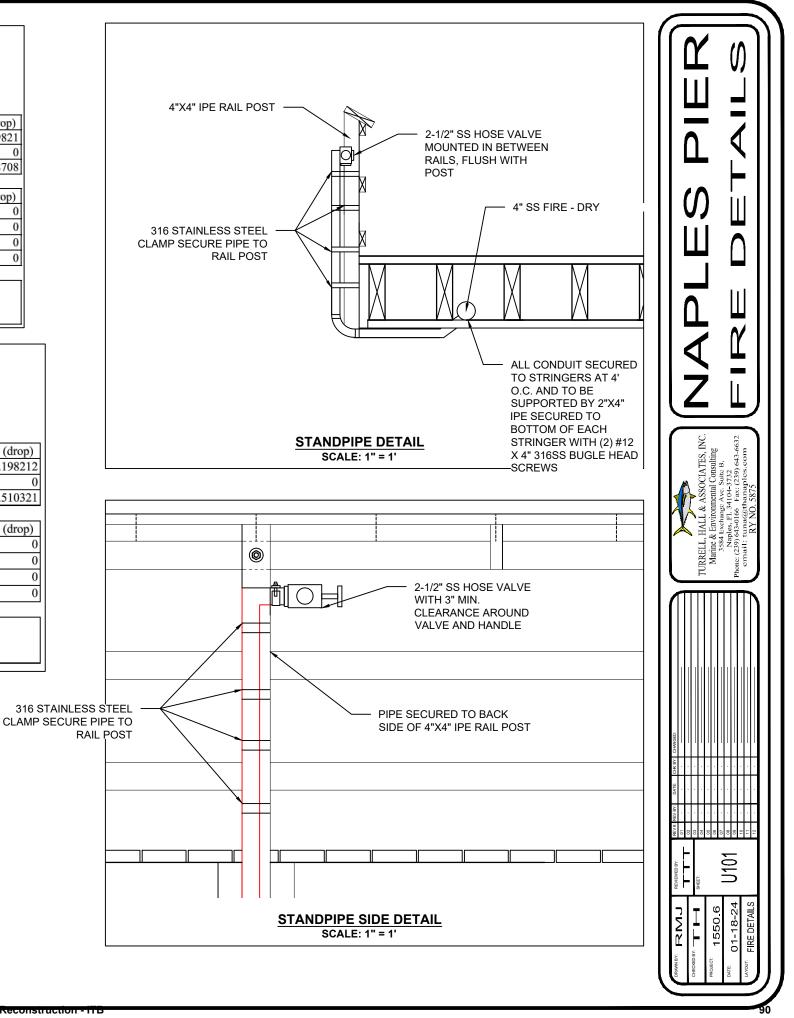
3rd Most Remote Valve GPM 500 Result overall PSI (drop) 51.0943755 SS Nominal Diameter (in) Diameter (in) C(Coeff).) Length(ft) PSI (drop) 2 - 1/22.5 150 75 36.19821 150 2 3 C 4 150 572 27.98708 4 HDPE Nominal Diameter (in) Diameter (in) C(Coeff).) Length(ft) PSI (drop) 1.92 150 2.83 150 0 3.633 150 0 5.349 150 0 GPM = Gallons per minute PSI = Pounds per square inch Based on Hazen-Williams Formula

Naples Pier

GPM	500			
Result overall PSI (drop)	51.7085329			
SS				
Nominal Diameter (in)	Diameter (in)	C(Coeff).)	Length(ft)	PSI (drop)
2-1/2	2.5	150	75	36.19821
3	3	150	0	
4	4	150	317	15.51032
HDPE				
Nominal Diameter (in)	Diameter (in)	C(Coeff).)	Length(ft)	PSI (drop
2	1.92	150	0	
3	2.83	150	0	
4	3.633	150	0	
6	5.349	150	0	

PSI = Pounds per square inch Based on Hazen-Williams Formula



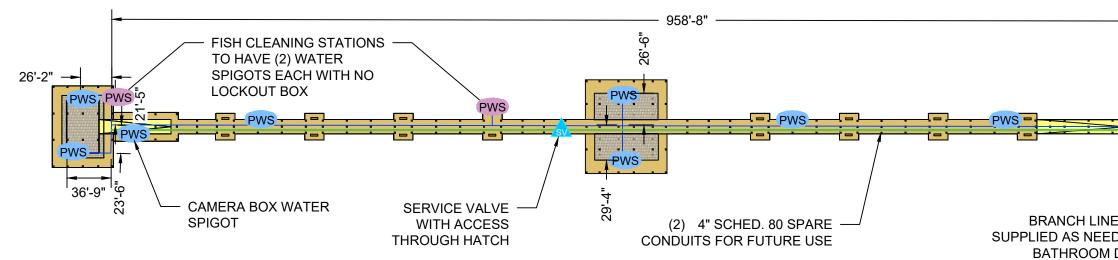


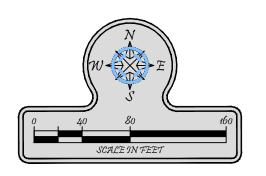
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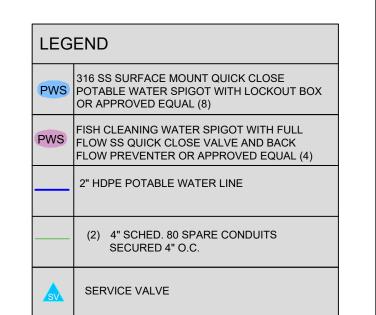


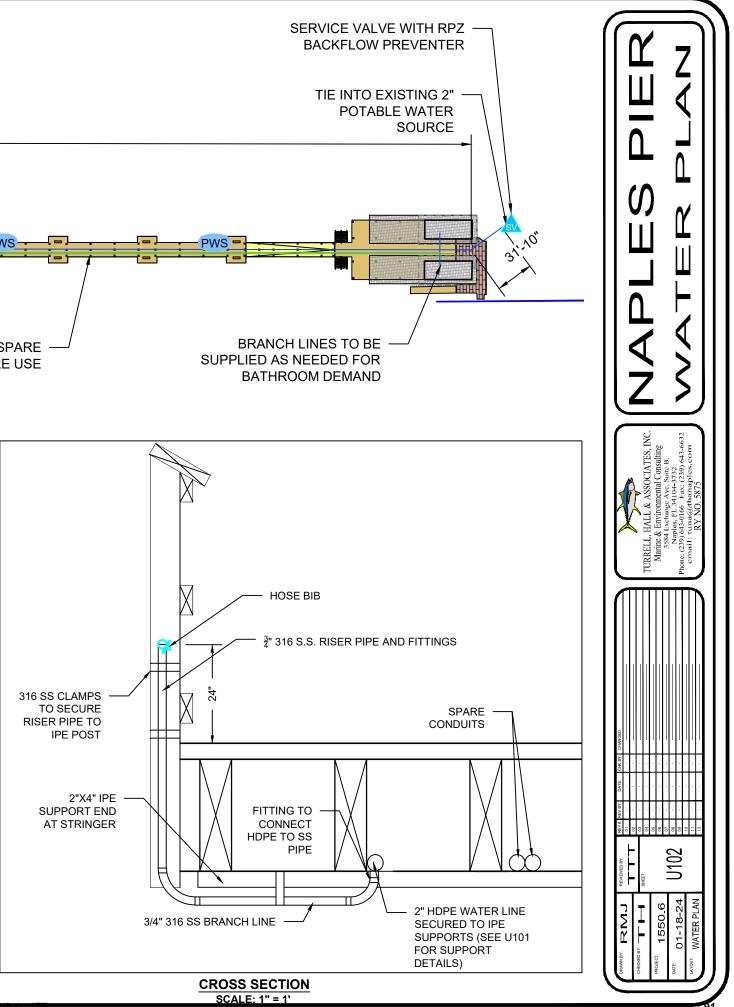




POTABLE WATER SPECIFICATIONS:

- INSTALLATION OF ALL PIPING SHALL BE PER THE LATEST EDITION ACCEPTED BY 1 THE LOCAL AHJ OF THE FLORIDA BUILDING CODE - PLUMBING EDITION AND COMPLY WITH AWWA C901, ASTM D3350, AND ASTM F714.
- 2. ALL PIPES, FITTINGS, AND JOINTS SHALL CONFORM TO THE FOLLOWING:
- 2.1. WATER TRUNK LINES SHALL BE HIGH DENSITY POLYETHYLENE (HDPE) SDR 11 PRESSURE RATED PIPE WITH HEAT FUSED JOINTS. THE PIPING SHALL HAVE UV STABILIZERS.
- BALL VALVES FOR SERVICE VALVES SHALL BE FULL PORT TYPES 2.2.
- ALL PLUMBING SHALL BE PRESSURE TESTED PRIOR TO CONNECTING TO EXISTING 3. UTILITIES. TEST RESULTS SHALL BE SIGNED BY THE LICENSED PLUMBER AND PROVIDED TO THE EOR. PIPING SHALL BE TESTED TO A MINIMUM OF 1.5X STREET PRESSURE AND PRESSURE SHALL BE MAINTAINED FOR AT LEAST 2 HOURS.
- DOMESTIC WATER SUPPLY SHALL BE CONNECTED / EXTENDED
- 5. ALL PIPE HANGERS, STRAPS, NUTS, BOLTS, ANGLE SUPPORTS, ETC. SHALL BE 316 STAINLESS STEEL.
- PIPING SHALL BE STRAPPED TO DOCK SYSTEM UTILIZING INTERFERENCE FIT 316 6. STAINLESS STEEL STRAPS THAT RESTRAIN EXPANSION AND CONTRACTION.





BUILDING DESIGN CRITERIA

ENVIRONMENTAL CLASSIFICATION

GENERAL CONDITIONS:

1

GOVERNING CODE: 2023 FLORIDA BUILDING CODE IN CONJUNCTION WITH ASCE 7-22

GOVERNING CODE: 2023 FLORIDA BI	JILDING CODE IN CONJUN	CHON	WITH ASCE 7-22	1.	(
RISK CATEGORY:		Ш			Ē
FLOOR LIVE LOADS:					Ē
ASSEMBLY		100	PSF		E
WIND LOAD:					
ULTIMATE DESIGN WIND SPEE NOMINAL DESIGN WIND SPEE WIND EXPOSURE:	(Vasd):	129.4 D	MPH MPH	2.	F
INTERNAL PRESSURE COEFFIC COMPONENTS AND CLADDING			(OPEN) ASCE 7-22	3.	1
WAVE LOAD:	PROVIDED BY HUMISTO	N & M	OORE ENGINEERS		1
WAVE HEIGHT (FT) 14 12 10 8		WAV 29,63 21,77 15,12 9,677	73 20	4.	F E 1 A
6 4 2		5,443 2,419 605	3	5.	F

SEE ARCHITECTURAL. PLUMBING. & ELECTRICAL DRAWINGS FOR OTHER

CONDITIONS RELATED TO EXISTING CONSTRUCTION, EXISTING SERVICES, AND THE SITE BEFORE BEGINNING WORK.

CONSTRUCTION LOADS SHALL NOT EXCEED DESIGN LIVE LOADS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DESIGN REQUIRED TO SUPPORT CONSTRUCTION COUPMENT USED IN CONSTRUCTING THIS PROJECT. ALL EQUIPMENT SUPPORT DESIGN SHALL BE PERFORMED BY AN ENGINEER LICENSED IN THE STATE OF THE PROJECT. SHORING AND RESHORING IS THE RESPONSIBILITY OF THE CONTRACTOR.

THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE FOLLOWING ITEMS THAT WILL NOT BE REVIEWED BY THE OWNER, ARCHITECT OR ENGINEER:

B. DIMENSIONS, ELEVATIONS AND CONDITIONS TO BE CONFIRMED AND CORRELATED AT THE SITE.

D. MEANS, METHODS, TECHNIQUES, PROCEDURES OF CONSTRUCTION AND CONSTRUCTION SAFETY.

SEE AND/IT ECTORMATION RELATED TO STRUCTURAL DRAWINGS TO CO PERTINENT INFORMATION RELATED TO STRUCTURAL WORK AND COORDINATE AS REQUIRED. CONTRACTOR SHALL COORDINATE STRUCTURAL DRAWINGS WITH ALL OTHER DRAWINGS WITHIN THE CONTRACT DOCUMENTS.

2 THE CONTRACTOR SHALL VERIEVALL DIMENSIONS ELEVATIONS AND

4. IF MATERIALS, QUANTITIES, STRENGTHS OR SIZES INDICATED BY THE IF MATERIALS, QUANTITIES, STRENGT IS US SIZES INDICATED BY THE DRAWINGS ARE NOT IN AGREEMENT WITH THESE NOTES, THE BETTER QUALITY AND/OR QUANTITY, STRENGTH OR SIZE INDICATED, SPECIFIED OR NOTED SHALL BE PROVIDED.

A. DEVIATIONS FROM CONTRACT DOCUMENTS.

E. COORDINATION OF THE WORK OF ALL TRADES.

C. FABRICATION PROCESS INFORMATION.

PRECAST CONCRETE PILES

- CODES AND STANDARDS: ALL PRECAST CONCRETE FILE WORK, DETAILING, FABRICATION AND ERECTION SHALL BE GOVERNED BY CONTRACT DOCUMENTS AND LATEST EDITIONS OF BELOW UNLESS NOTED OTHERWISE: A. FDOT STANDARD SPECE FOR ROAD AND BRIDGE CONSTRUCTION: SECTION 455 AND ALL REFERENCED SECTIONS В. FDOT STRUCTURES DESIGN GUIDELINES: SECTION 3.5 AND ALL REFERENCED SECTIONS
- THE GENERAL CONTRACTOR AND THE FOUNDATION CONTRACTOR SHALL FAMILIARIZE THEMSELVES WITH THE SURVEY AND THE GEOTECHNICAL REPORT BEFORE STARTING CONSTRUCTION.
- NOTIFY THE A/E AND OWNER'S REPRESENTATIVE OF ANY UNUSUAL SOIL CONDITION THAT ARE IN VARIANCE WITH TEST BORINGS, SUCH AS WHEN A DIFFERENT BEARING MATERIAL IS EVIDENT AND THERE IS A QUESTION OF THE BEARING CAPACITY.
- PROVIDE PILES IN ACCORDANCE WITH SOILS REPORT PREPARED BY NOVA ENGINEERING AND ENVIRONMENTAL, LLC AND DESIGNATED REPORT # 10106-2022029 DATED 10/18/23. THE SOILS REPORT SHALL BE CONSIDERED A PART OF THE CONSTRUCTION DOCUMENTS FOR THE PROJECT.
- PRECAST CONCRETE PILES SHALL BE MANUFACTURED WITH A MIX DESIGNED TO A FC OF 6000 PSI AT DRIVING. CONCRETE SHALL ATTAIN A MINIMUM FO OF 3000 PSI BEFORE STRANDS ARE RELEASED. THE USE OF HIGH LEARLY CEMENT OR ADDITIVES SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND EVALUATION PRIOR TO FARE/CATION. STRANDS SHALL COMPLY WITH ASTIN A-416, ALD FUES SHALL BE DRIVEN OR JETTED, TO A CONCRETE PILE TIP ELEVATION TO MEET GEOTECHNICAL REPORT RECOMMENDATIONS
- 6. TOTAL PILE LENGTHS AT: A. EAST (BEACH) END OF PIER WILL BE APPROXIMATELY 70'± LONG B. WEST END OF PIER WILL BE APPROXIMATELY 100'± LONG
- 7. ULTIMATE SOIL CAPACITIES OF 18"X18" PILES PER GEOTECHNICAL REPORT
- ULTIMATE AXIAL COMPRESSION CAPACITY EAST (BEACH) END OF PIER = 300K WEST END OF PIER = 650K ULTIMATE AXIAL TENSION CAPACITY В.
- EAST (BEACH) END OF PIER = 160K WEST END OF PIER = 190K
- ULTIMATE PRECAST PRESTRESSED PILE DESIGN CAPACITIES A. REQUIRED AXIAL CAPACITY = 110K + DEAD LOAD OF THE PILE B. REQUIRED MOMENT CAPACITY = 3000K-IN REQUIRED SHEAR CAPACITY = 35K
- C. ALLOWING OWNER OWNER CONTRACT AND A CONTRACT ON THE OWNER AS SET FORTH IN FOOT SHALL BE USED TO ESTABLISH ACCEPTABILITY OF TESTED PILES. LOAD TESTING APPARATUS AND PROCEOURE SHALL BE SUBMITTED TO THE ENGINEER VERIFCATION THE SHALL BE USED TO ESTABLISH ACCEPTABILITY OF TESTED PILES. LOAD TESTING, LOCATION OF THE LOAD TEST SHALL BE AT THE DISCRETION OF THE ENGINEER. VERIFCATION THAT THE LOAD TEST REQUIREMENTS HAVE BEEN MET SHALL BE MADE BY AN INDEPENDENT GEOTECHNICAL CONSULTANT EMPLOYED BY THE OWNER AND APPROVED BY THE ENGINEER.
- 10. AN AS-BUILT SURVEY OF PILE LOCATIONS SHALL BE PERFORMED BY A LAND SURVEYOR REGISTERED IN THE SAME STATE AS THE PROJECT LOCATION. PILES SHALL BE LOCATED ON THE AS-BUILT DRAWINGS HORIZONTALLY AND VERTICALLY FROM THE PILE CENTER-LINES. SUBMIT AS-BUILT DRAWINGS TO THE STRUCTURAL ENGINEER FOR APPROVAL PRIOR TO CASTING GRADE BEAMS AND/OR PILE CAPS.
- 11. PILES TO BE FURNISHED TO THEIR TOTAL PRODUCTION LENGTH. PLANNED SPLICES REQUIRE PRIOR APPROVAL FROM THE ENGINEER.

PRECAST CONCRETE:

- CODES AND STANDARDS: ALL PRECAST CONCRETE WORK, DETAILING, FABRICATION AND ERECTION SHALL BE GOVERNED BY CONTRACT DOCUMENTS AND LATEST EDITIONS ACI 318 - BUILDING CODE REQUIREMENT FOR STRUCTURAL CONC.
- ACI 318 BUILDING CODE REQUIREMENT FOR STRUCTURAL CONC. ACI 301 SPECIFICATION OF STRUCTURAL CONCRETE. PCI MINL 116 MANUAL FOR QUALITY CONTROL. PCI CODE OF STANDARD PRECS FOR ROAD AND BRIDGE CONSTRUCTION. SECTION 455 AND ALL REFERENCED SECTIONS (UN A). PDOT STRUCTURED DESIGN GUIDELLINES. SECTION 35 AND ALL REFERENCED SECTIONS (UN A).

- CONCRETE SHALL HAVE THE FOLLOWING MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS: PRECAST PILING: CLASS V (SPECIAL), fc = 6.000PSI
- THE PRECAST CONCRETE MANUFACTURING PLANT SHALL BE CERTIFIED BY THE PRESTRESSED CONCRETE INSTITUTE, PLANT CERTIFICATION PROGRAM, PRIOR TO THE START OF PRODUCTION.
- MATERIALS PORTLAND CEMENT: ASTM C150.
- AGGREGATES: ASTM C33. PRESTRESSING STRANDS: ASTM 416, GRADE 270, 7 WIRE UNCOATED.
- GROUT: ASTM 476 CONNECTORS: STAINLESS STEEL ASTM A666 TYPE 304
- CONNECTOR'S STAILLESS STEEL ASTM ABBE TYPE 304 REINFORCING BARS: ASTM 1615 Fyr = 60 KSI. WELD BABLE REINFORCING BARS: ASTM 706; Fyr = 60 KSI(PLAIN). AIR-ENTRAINING AGENT: ASTM C260 CORROSION INHIBITOR REGUIRED: FOOT 924-2.2 (ASTM G109)
- 5. SUBMITTALS SUBMIT SHOP DRAWINGS FOR REVIEW THAT INCLUDES BUT NOT LIMITED TO
 - ITED TO: ERECTION PLANS, ELEVATIONS AND PIECE SHEETS. CONNECTION DETAILS AND HARDWARE ATTACHMENTS. DESIGN LOADS.
 - SUBMIT CALCULATIONS SIGNED AND SEALED BY A PROFESSIONAL
 - ENGINEER REGISTERED IN THE STATE OF THE PROJECT. PROVIDE MANUFACTURER STANDARD PUBLISHED LITERATURE AND C.
 - LOAD TABLES. TEST REPORTS: a. CERTIFICATES FOR MATERIAL COMPLIANCE WITH

CONNECTORS:

- EDINITICATION
 EDINITICATION
 EDINITICATION
 CONTRESSIVE STRENGTH TEST RESULTS.
 COMPRESSIVE STRENGTH TEST RESULTS.
 NO FARRIGATION OR ERECTION UNTIL ALL SUBMITTALS HAVE BEEN
 APPROVED BY STRUCTURAL ENGINEER. b
- ALL CONNECTIONS SHALL BE DESIGNED SO AS NOT TO BE EXPOSED TO WEATHER NOR TO VIEW FROM THE EXTERIOR.
- TOLERANCE: A. TO CONFORM WITH THE PRESTRESSED CONCRETE INSTITUTE SPECIFICATIONS
- SPECIFICATIONS. LENGTH AND WIDTH OF UNIT: a. UNIT 10 FEET TAND LESS: +/- 1/8 INCH. b. UNIT 10 FEET TO 20 FEET: +/- 1/8 INCH. c. UNIT 20 FEET TO 30 FEET: +/- 3/8 INCH THICKNESS OF UNIT: +/- 1/8 INCH PER 6 FEET, MEASURED ALL DUACONAI DUACONAI

- DIAGONAL. INSERTS: +/- 3/8 INCH CAMBER OR SWEEP: +/- 1/8 INCH PER 10 FEET, UPTO 1/2 INCH MAXIMUM. DIFFERENTIAL BETWEEN TWO ADJACENT UNITS TO BE NO MORE THAN ONE-HALF THE MAXIMUM ALLOWED.
- MISCELLANEOUS: A. THE CONTRACTOR SHALL PROVIDE TEMPORARY BRACING, AS REQUIRED, DURING THE ERECTION OF PRECAST UNITS. B. COORDINATE WITH OTHER TRADES FOR ALL EMBEDDED ASSCESSORIES.

STRUCTURAL DELEGATED DESIGN AND DEFERRED SUBMITTALS:

- STRUCTURAL DELEGATED DESIGN AND SUBSEQUENT DEFERRED SUBMITALS ARE FOR ELEMENTS, PARTS, OR PORTIONS OF THE OVERALL STRUCTURAL SYSTEM THAT ARE INDICATED OR REFERED TO ON THESE DRAWINGS AND THAT ARE CRITICAL TO THE PERFORMANCE TO THE OVERALL STRUCTURAL SYSTEM DESIGN CRITERIA HAS BEEN PROVIDED FOR THESE ITEMS IN THE STRUCTURAL NOTES, PLANS, AND DETAILS.
- STRUCTURAL DEFERRED SUBMITTALS ARE COMPLETE PACKAGE TO BE SUBMITTED FOR REVIEW THAT INCLUDE DRAWINGS AND CALCULATIONS FOR ALL DELEGATED DESIGN ITEMS INCLUDING CONNECTIONS AND ANCHORAGE TO THE BUILDING STRUCTURE. THEY SHALL BE STAMPED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF FLORIDA.
- EOR WILL REVIEW STRUCTURAL DEFERRED SUBMITTALS TO VERIFY DESIGN CRITERIA IS COMPLIANT WITH THE APPROVED CONSTRUCTION DOCUMENTS.
- 4. STRUCTURAL DELEGATED DESIGN COMPONENTS SHALL NOT BE INSTALLED UNTIL APPROVED BY THE BUILDING OFFICIAL.
- 5. STRUCTURAL DELEGATED DESIGN ITEMS REQUIRING SUBMITTALS INCLUDE, BUT ARE NOT LIMITED TO:
- PRECAST PILES TEMPORARY SHORING AND BRACING OF EXISTING STRUCTURE TO

MECH'L, ELEC'L, PLUMBING, FIRE PROTECTION & OTHER SUSPENDED ITEM:

- CUMPING DEVICE WHICH DIN ON TO DAMAGE OR DEFORM THE STRUCTURAL ELEMENTS. WELDING TO OR DRILLING HOLES IN STRUCTURAL MEMBERS IS NOT PERMITTED WITHOUT PRIOR APPROVAL OF THE STRUCTURAL ENGINEER. IT IS THE RESPONSIBILITY OF THE INSTALLING CONTRACTOR TO OCATE AND DISTRIBUTE HANGING LOADS AS REQUIRED SO AS TO NOT
- TRAPEZING IS PERMITTED FOR MULTIPLE PIPE OR CONDUIT RUNS. LOADS FROM TRAPEZE HANGERS SHALL BE AS PREVIOUSLY NOTED FOR SUPPORTS FROM JOIST ELEMENTS. TRAPEZING IS NOT PERMITTED FOR PIPING AND/OR CONDUIT GREATER THAN 3" IN DIAMETER.
- THE LOADS UNIFORMLY ACROSS STRUCTURAL MEN
- ALL HANGERS, WIRES, RODS ETC, FOR SUSPENDED ITEMS SUCH AS PIPING.

ANY CHANGES TO THE STRUCTURAL SYSTEMS SHALL BE REDESIGNED BY A PROFESSIONAL ENGINEER AT NO COST TO THE OWNER OR THE EOR AND SUBMITTED TO THE EOR FOR REVIEW. SUBMITTAL SHALL BE ACKNOWLEDGED IN WRITING BENORE BEGINNING CONSTRUCTION. IF CHANGES ARE MADE WITHOUT WRITTEN APPROVAL SUCH CHANGES SHALL BE THE LEGAL AND FINANCIAL RESPONSIBILITY OF THE PARTY MAKING THE CHANGE TO REPLACE OR REPAIR THE CONDITION AS DIRECTED BY THE CHANGE TO REPAIR THE CONDITION AS DIRECTED BY THE CHANGE TO REPAIR THE CONDITION AS DIRECTED BY THE CHANGE TO REPAIR THE CON REPAIR THE CONDITION AS DIRECTED BY THE CHANGE TO REPAIR THE REPAIR THE CONDITION AS DIRECTED BY THE CHANGE TO REPAIR THE RE

EXTREMELY AGGRESSIVE

EXISTING CONDITIONS:

- THE INFORMATION SHOWN ON THE ARCHITECTURAL AND STRUCTURAL CONSTRUCTION DOCUMENTS IS BASED ON ASSUMPTIONS OF THE EXISTING BUILDING CONSTRUCTION ORGINAL CONSTRUCTION DOCUMENTS WERE NOT AVAILABLE FOR THE PREPARATION OF THESE DOCUMENTS. THE CONTRACTOR IS TO NOTIFY THE EOR IF CONDITIONS DIFFERING FROM THOSE STATED ARE UNCOVERED IN THE DEMOLITION PROCESS.
- CONTRACTOR IS RESPONSIBLE TO UNCOVER AND VISUALLY FIELD VERIFY 2. THE EXISTING CONSTRUCTION PRIOR TO THE START OF ANY WORK AFFECTING THE EXISTING STRUCTURE. CONTRACTOR IS TO REPORT ANY CHANGES OR DISCREPANCIES FROM THOSE SHOWN TO THE EOR.

City of Naples

- CONNECTIONS TO SUPPORTING STRUCTURAL MEMBERS, SHALL BE EXCEED THE LOAD CARRYING CAPACITY OF THE MEMBER.
- THE APPROPRIATE INSTALLING CONTRACTOR IS RESPONSIBLE FOR DETERMINING LOADS IMPOSED BY THE INSTALLED ITEMS. STAGGER HANGERS AND SUPPORTS FROM THE STRUCTURE SO AS TO DISTRIBUTE
- CONTRACTORS INSTALLING MEP & FP SYSTEMS SHALL COORDINATE ROUTING PRIOR TO INSTALLATION SO AS TO DISTRIBUTE THE LOADING TO THE STRUCTURE UNIFORMLY. DO NOT HANG ALL SYSTEMS FROM THE SAME FRAMING MEMBER.
- ALL PARNEERS, WIRES, RUDS ETC. FOR SUSPENDED LIEBES SUCH & CONDUIT, DUT WORK, FIRE PROTECTION, SUSPENDED CELINGS, TECHNOLOGY, ETC. SHALL BE INSTALLED FROM MAIN STRUCTURAL MEMBERS, HANGERS ATTACHED TO METAL ROOF DECK, JOIST BRII OR PROM OTHER NON-STRUCTURAL SYSTEMS IS STRICTLY PROHIE ALL THE ABOVE SHALL BE CORRAL SYSTEMS IS TRICTLY PROHE

CAST IN PLACE CONCRETE:

CODES AND STANDARDS

2.

3.

В.

C.

C.

JOINTS: A. CO

C.

D.

7. CURING:

- CODES AND STANDARDS: ALL CAST-IN-PLACE CONCRETE WORK, DETAILING, FABRICATION AND PLACING OF REBARS, TESTING, SAMPLING, AND CONCRETE SHALL BE GOVERNED BY CONTRACT DOCUMENTS AND LATEST EDITIONS OF: A CAI 316 BUILDING CODE REGUINEMENT FOR STRUCTURAL CONC. B CAI 316 BETAILS AND DETAILING OF CONCRETE REMERING CAUSTON DETAILS AND DETAILING OF CONCRETE REMERING CAUSTON DETAILS AND DETAILING OF CONCRETE REMERING CAUSTON DETAILS AND METRIALS
- AG 111 SPECIFICATION FOR TOLEVANCES FOR CONCERE CONSTRUCTION AND MATERIALS. ACI 305 SPECIFICATION OF HOT WEATHER CONCRETING. ACI 306 SPECIFICATION OF COLD WEATHER CONCRETING. FIELD REFERENCE MANUAL MUST BE PRESENT ON SITE. CONCRETE REMERROR(ING STELL INSTITUTE (ORSI).
- FDOT STANDARD SPECS FOR ROAD AND BRIDGE CONSTRUCTION FDOT STRUCTURES DESIGN GUIDELINES
- CONCRETE SHALL HAVE THE FOLLOWING MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS: A. CIP BEAMS/BENTS: CLASS IV, fc = 5,500PSI
- MATERIALS

 - ENIALS: PORTLAND CEMENT: ASTM C150. AGGREGATES: ASTM C33. AIR-ENTRAINING: ASTM C260. REINFORCING BARS: ASTM 615 Fy = 60 KSI.
 - WELDABLE REINFORCING BARS: ASTM 706, Fy = 60 KSI.
- ADMATCHESK BOARD RANGE REDUCER: ASTM C494, TYPE A OR D. b. HOCHANGE WATER REDUCER: ASTM C494, TYPE A OR D. b. HOCHANGE WATER REDUCER: ASTM C494, TYPE F OR G. c. AADMATCHESKTOR: ASTM MAGH TYPE C OR E. FLY ASH: ASTM C618, TYPE OR F.
- CORROSION INHIBITOR REQUIRED: EDOT 924-2 2 (ASTM G109)
- SUBMITTALS:
 SUBMITSHOP DRAWINGS FOR REVIEW AND APPROVAL WHICH INCLUDE ERECTIONS PLANS, POUR SEQUENCE (IF APPLICABLE), CONSTRUCTION JOINTS AND/OR EXPANSION JOINTS, ELEVATIONS AND REBAR BENDING SCHEDULES. SUBMIT A MIX DESIGN FOR EACH MIX USAGE REQUIRED ON THE

 - PROJECT: SUBMIT PRODUCT LITERATURE FOR ADMIXTURES AND CURING COMPOUNDS. SUBMIT REPORTS FOR ALL REQUIRED TESTING AND INSPECTIONS. NO CONCRETE SHALL BE PLACED UNTIL ALL SUBMITTALS HAVE BEEN PPROVED BY EOR
- 5. SPLICES: A. REINFORCING BARS LAP SPLICE LENGTHS SHALL CONFORM WITH THE MINIMUM LAP SPLICE TABLE. MECHANICAL BAR SPLICES DEVICES THAT PROVIDE A FULL TENSION SPLICE WITH A CAPACITY OF 125 PERCENT OF THE BAR YIELD STRENGTH MAY BE USED. PROVIDE CLASS B TENSION LAP SPLICES.
 - CONSTRUCTION JOINTS PERMITTED ONLY WHERE SHOWN OR AS APPROVED BY STRUCTURAL ENGINEER. PROPOSED CONSTRUCTION JOINT LOCATIONS TO BE SUBMITTED TO EOR FOR REVIEW. ALL CONSTRUCTION JOINTS BELOW GRADE SHALL HAVE WATER STOPS UNO
 - STOPS UNO. NO HORIZONTAL CONSTRUCTION JOINT WILL BE PERMITTED IN BEAMS UNLESS SPECIFICALLY SHOWN IN THE DRAWINGS OR APPROVED BY THE STRUCTURAL ENGINEER IN BEAM CONSTRUCTION, PROVIDE KEYED CONSTRUCTION JOINT AT
 - TO COMMENCE IMMEDIATELY AFTER CONCRETE PLACEMENT AND CONTINUE FOR AT LEAST 7 DAYS. DO NOT ALLOW CURING METHOD TO BE DELAYED OVERNIGHT. CURING MATERIALS IN ACCORDANCE WITH FDOT 925.

8. MISCELLANEOUS:

PRECA

REBAR SIZE

#5 3

#18 2

- ZELLANEOUS: PROVIDE CORROSION RESISTANT ACCESSORIES SUCH AS GRAY PLASTIC CHARS IN ALL EXPOSED CONORETE CONSTRUCTION. PRECAST CONCRETE CUBES OR SAND PLATE CHARIS SHALL BE USED FOR THE SUPPORT OF THE REINFORCING ON GRADE. CONCRETE BLOCK OR CLAY MASORRY BRICK ARE NOT PERMITTED.
- BLOCK OR CLAY MASONRY BRICK ARE NOT PERMITTED. 34° CHAMFER FOR EXPOSED EDGES OF CONCRETE UNO. COORDINATE WITH ALL TRADES INVOLVED FOR THE REQUIRED SIZE AND LOCATION OF ALL ANCHORS, SLEEVES, PADS, DEPRESSIONS, OPENINGS AND EMBEDS. BOND BREAKER MATERIAL SHALL BE 30 POUND FELT PAPER. ALL FORMWORK AND BRACING SHALL BE REMOVED INCLUDING ANY INTERNAL CORRODIBLE FASTEMERS.

CONCRETE REBAR COVER	
EXPOSURE CONDITION	COVER
AST PILES	3"
S/BENTS	3"

CONCRETE REBAR LAP SPLICE (CLASS B) - Fc = 5500 PSI

3/4" COVER 11/2		1 1/2" (1 1/2" COVER		2" COVER		OVER
ГОР	OTHER	TOP	OTHER	TOP	OTHER	TOP	OTHER
16"	16"	16"	16"	16"	16"	16"	16"
22"	17"	18"	16"	18"	16"	18"	16"
32"	25"	22"	17"	22"	17"	22"	17"
44"	34"	26"	20"	26"	20"	26"	20"
70"	54"	43"	33"	38"	29"	38"	29"
87"	67"	54"	42"	44"	34"	44"	34"
105"	81"	67"	52"	54"	42"	49"	38"
126"	97"	82"	63"	66"	51"	55"	43"
147"	114"	97"	75"	80"	61"	61"	47"
194"	149"	132"	102"	109"	84"	81"	62"
292"	225"	209"	161"	176"	135"	133"	103"

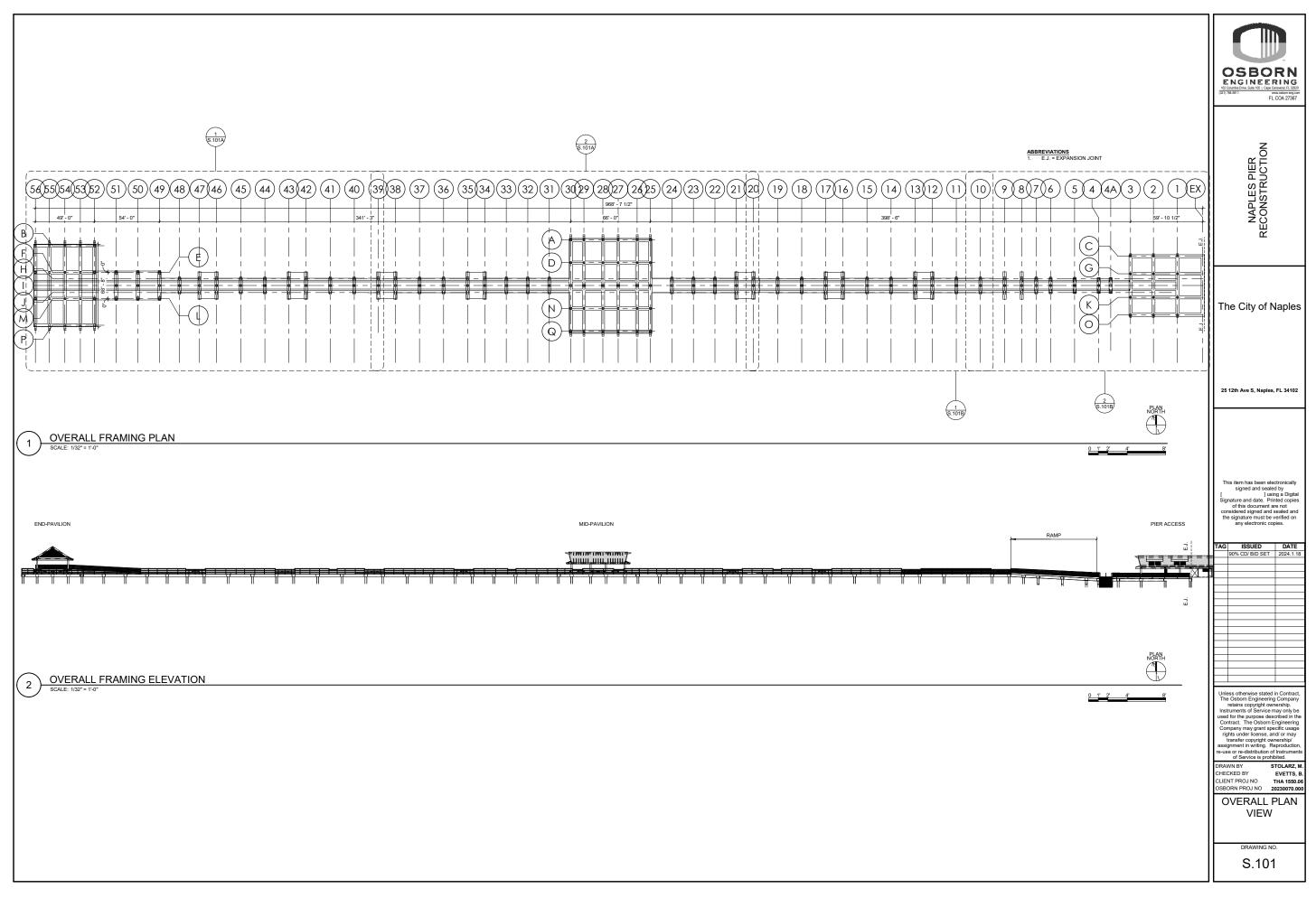
	3/4" (OVER	1 1/2"	COVER	2" C	OVER	3" C	OVER
AR SIZE	TOP	OTHER	TOP	OTHER	TOP	OTHER	TOP	OTHER
#3	12"	12"	12"	12"	12"	12"	12"	12"
#4	17"	13"	14"	12"	14"	12"	14"	12"
#5	25"	19"	17"	13"	17"	13"	17"	13"
#6	34"	26"	20"	16"	20"	16"	20"	16"
#7	54"	42"	33"	26"	29"	23"	29"	23"
#8	67"	51"	42"	32"	34"	26"	34"	26"
#9	81"	62"	52"	40"	42"	32"	38"	29"
#10	97"	75"	63"	49"	51"	39"	43"	33"
¥11	114"	87"	75"	58"	61"	47"	47"	36"
¥14	149"	115"	102"	78"	84"	65"	62"	48"
#18	225"	173"	161"	124"	135"	104"	103"	79"

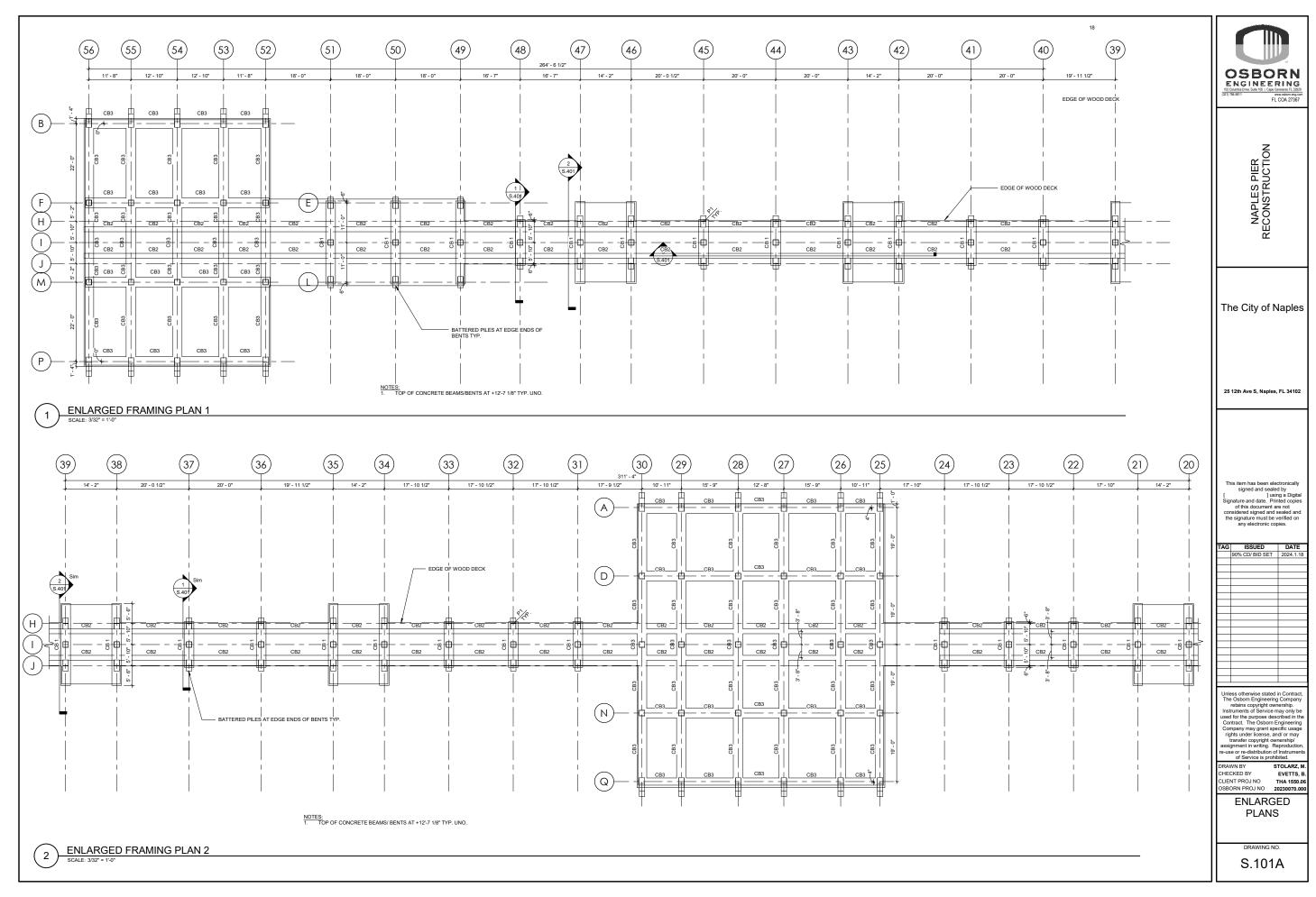


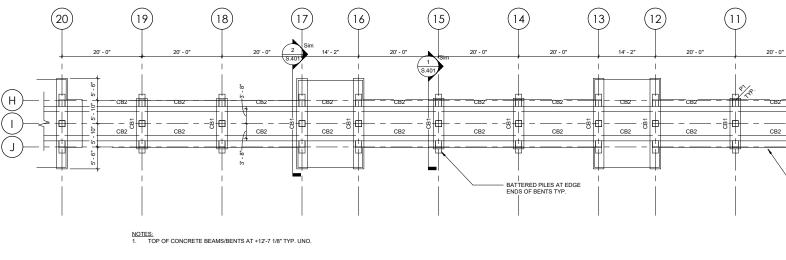
	SPECIAL INSPECTION					
	TYPE	REQUIRED	CONTINUOUS	PERIODIC		ת
1704.3 -	STEEL				2	VERIFICATION OF PROPORTION
1	MATERIAL VERIFICATION OF HIGH-STRENGTH BOLTS, NUTS AND WASHERS	No	-	-		OR PREBLENDED MORTAR OR
2	INSPECTION OF HIGH-STRENGTH BOLTING - BEARING	No	-		3	VERIFICATION OF SLUMP PROPORTION OF SITE-PREPAR
2	CONNECTIONS.	110	-	-	5	PLACEMENT OF MASONRY UNIT
3	INSPECTION OF HIGH-STRENGTH BOLTING: - SLIP CRITICAL	No	-	-	Ű	MORTAR JOINT
	CONNECTIONS.				6	PLACEMENT OF REINFORCEME
4	MATERIAL VERIFICATION OF STRUCTURAL STEEL COLD-FORMED STEEL DECK	No	-	-	7	GROUT SPACE PRIOR TO GROU
5	MATERIAL VERIFICATION OF WELD FILLER MATERIALS.	No	-	-	8	GROUT PLACEMENT
6	COMPLETE AND PARTIAL JOINT PENETRATION GROOVE	No	-	-	9	SIZE AND LOCATION OF STRUC TYPE, SIZE AND LOCATION OF
	WELDS.				10	STRUCTUAL MEMBERS
7	MULTI-PASS FILLET WELDS. SINGLE-PASS FILLET WELDS > 5/16".	No No	-	-	11	TYPE, SIZE AND GRADE OF REI
9	SINGLE-PASS FILLET WELDS > 5/16". PLUG AND SLOT WELDS	NO	-	-		BOLTS
10	SINGLE-PASS FILLET WELDS < 5/16".	No	-	-	12	WELDING OF REINFORCING BA
11	FLOOR AND ROOF DECK WELDS.	No	-	-	13	COLD WEATHER CONSTRUCTION PREPARATION OF GROUT AND
12	VERIFICATION OF WELDABILITY OF REINFORCING STEEL	No	-	-	.4	TESTING
	OTHER THAN ASTM A706.				1704.6 -	WOOD
13	WELDING OF REINFORCING STEEL RESISTING FLEXURAL AND AXIAL FORCES IN INTERMEDIATE AND SPECIAL MOMENT FRAMES	No	-	-	1	FABRICATED LOAD BEARING AS (TRUSSES/COMPOSITE i-JOISTS
14	WELDING OF SHEAR REINFORCMENT	No		-	2	PREMISES OF THE FABRICATO HIGH-LOAD DIAPHRAGMS
15	INSPECTION OF STEEL FRAME JOINT DETAIL FOR COMPLIANCE	No	-	-	3	METAL-PLATE-CONNECTED WC
	WITH APPROVED CONSTRUCTION DOCUMENTS.				l ů	GREATER THAN 60 FEET
16	COLDFORM STEEL TRUSSES SPANNING GREATER THAN 60 FEET	No	-	-	1704.7 -	
704.4 -	CONCRETE				1	VERIFY MATERIALS BELOW SHA
1	INSPECT REINFORCEMENT, INCLUDING PRESTRESSING	Yes	-	×	2	ADEQUATE TO ACHIEVE THE DI VERIFY EXCAVATIONS ARE EXT
	TENDONS, AND VERIFY PLACEMENT.				2	HAVE REACHED PROPER MATE
2	VERIFY WELDABILITY OF REINFORCING BARS OTHER THAN ASTM A706.	No	-	-	3	PERFORM CLASSIFICATION ANI MATERIALS.
3	INSPECTION OF CAST-IN-PLACE ANCHOR BOLTS.	Yes	x	-	4	VERIFY USE OF PROPER MATER
4	INSPECTION OF POST INSTALLED ANCHORS	Yes	-	X		THICKNESSES DURING PLACEN COMPACTED FILL.
5	VERIFY USE OF REQUIRED DESIGN MIX. SAMPLING SPECIMEN FOR TESTING	Yes Yes	- X	X -	5	PRIOR TO PLACEMENT OF COM
7	VERIFY CONCRETE AND SHOTCRETE PLACEMENT FOR	Yes	x	-	l °	SUBGRADE AND VERIFY THAT S
'	PROPER APPLICATION TECHNIQUES.	163	^	-		PROPERLY.
8	VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE	Yes	-	х	1704.8 -	VERIFY ELEMENT MATERIALS,
	AND TECHNIQUES. PRESTRESSED CONCRETE - APPLICATION OF PRESTRESSING	Mar		x		WITH THE REQUIREMENTS.
9	FORCES AND GROUTING BONDED TENDONS PRECAST CONCRETE - ERECTION OF MEMBERS.	Yes	-	x	2	DETERMINE CAPACITIES OF TE ADDITIONAL LOAD TESTS, AS R
11	POST TENSIONED CONCRETE - VERIFY IN-SITU CONCRETE	Yes	-	x	3	INSPECT DRIVING OPERATIONS
	STRENGTH, PRIOR TO STRESSING OF TENDONS IN POST TENSIONED CONCRETE AND PRIOR TO REMOVAL OF SHORESS	100		^	4	ACCURATE RECORDS FOR EAC VERIFY PLACEMENT LOCATION TYPE AND SIZE OF HAMMER, RE
12	AND FORMS FROM BEAMS AND STRUCTURAL SLAB. INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS	Yes		x		FOOT OF PENETRATION, DETER
12	OF THE CONCRETE MEMBER BEING FORMED.	res		^		PENETRATIONS TO ACHIEVE DI AND BUTT ELEVATIONS AND DO
704.5.1	- MASONRY LEVEL 1	L				FOUNDATION ELEMENT.
1	VERIFICATION OF fm.	No	-	-	5	FOR STEEL ELEMENTS, PERFO
2	VERIFICATION OF SLUMP FLOW	No	-	-		INSPECTIONS IN ACCORDANCE
3	PROPORTION OF SITE-PREPARED MORTAR	No	-	-	6	FOR CONCRETE ELEMENTS AN
4	CONSTRUCTION OF MORTAR JOINTS	No	-	-		ELEMENTS, PERFORM TESTS A INSPECTIONS IN ACCORDANCE
5	LOCATION OF REINFORCEMENT SIZE AND LOCATION OF STRUCTURAL ELEMENTS	No		-	7	FOR SPECIALTY ELEMENTS, PE
7	TYPE, SIZE AND LOCATION OF MASONRY ANCHORAGE TO STRUCTURAL MEMBERS	No	-	-		INSPECTIONS AS DETERMINED PROFESSIONAL IN RESPONSIBI
8	TYPE, SIZE AND GRADE OF REINFORCEMENT AND ANCHOR	No	-	-		CAST-IN-PLACE DEEP FOUNDAT
	BOLTS				1	INSPECT DRILLING OPERATION AND ACCURATE RECORDS FOR
9	WELDING OF REINFORCING BARS	No	-	-	2	VERIFY PLACEMENT LOCATION
10	COLD WEATHER CONSTRUCTION PRIOR TO GROUTING - CLEANING, REINFORCMENT	No	-	-		ELEMENT DIAMETERS, BELL DIA
	PRIOR TO GROUTING - CLEANING, REINFORCMENT PLACEMENT, GROUT PROPOTION AND MORTAR JOINTS	No		-		LENGTHS, EMBEDMENT INTO B ADEQUATE END-BEARING STRA CONCRETE OR GROUT VOLUME
11	GROUT RIACEMENT	No				
12	GROUT PLACEMENT PREPARATION OF GROUT AND MORTAR SPECIMEN FOR	No	· ·		3	FOR CONCRETE ELEMENTS PE
12 13	GROUT PLACEMENT PREPARATION OF GROUT AND MORTAR SPECIMEN FOR TESTING - MASONRY LEVEL 2	No No	-	-	3 OPEN-V	FOR CONCRETE ELEMENTS, PE SPECIAL INSPECTIONS IN ACCO VEB STEEL JOIST AND GIRDER

	SPECIAL INSPECTION			
	ТҮРЕ		CONTINUOUS	PERIODIC
2	VERIFICATION OF PROPORTIONS OF MATERIALS IN PREMIXED OR PREBLENDED MORTAR OR GROUT	No	-	•
3	VERIFICATION OF SLUMP	No	-	
4	PROPORTION OF SITE-PREPARED MORTAR	No	-	-
5	PLACEMENT OF MASONRY UNIT AND CONSTRUCTION OF MORTAR JOINT	No	-	•
6	PLACEMENT OF REINFORCEMENT	No	-	-
7	GROUT SPACE PRIOR TO GROUTING	No	-	•
8	GROUT PLACEMENT SIZE AND LOCATION OF STRUCTURAL ELEMENTS	No	-	-
10	SIZE AND LOCATION OF STRUCTURAL ELEMENTS TYPE, SIZE AND LOCATION OF MASONRY ANCHORAGE TO STRUCTUAL MEMBERS	No	-	•
11	TYPE, SIZE AND GRADE OF REINFORCMENT AND ANCHOR BOLTS	No		•
12	WELDING OF REINFORCING BARS	No	-	
13	COLD WEATHER CONSTRUCTION	No	-	-
14	PREPARATION OF GROUT AND MORTAR SPECIMENT FOR TESTING	No	-	-
1704.6 -				
1	FABRICATED LOAD BEARING ASSEMBLIES (TRUSSES/COMPOSITE i-JOISTS) CONDUCTED ON THE PREMISES OF THE FABRICATORS SHOP.	No	-	-
2	HIGH-LOAD DIAPHRAGMS	No	-	•
3	METAL-PLATE-CONNECTED WOOD TRUSSES SPANNING GREATER THAN 60 FEET	No	-	-
1704.7 -		N		
1	VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY. VERIFY EXCAVATIONS ARE FXTENDED TO PROPER DEPTH AND	No	-	•
2	HAVE REACHED PROPER MATERIAL.	No	-	•
3	PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS.	No	-	•
-	VERIFY USE OF PROPER MATERIALS, DENSITIES, AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.			
5	PRIOR TO PLACEMENT OF COMPACTED FILL, INSPECT SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.	No	-	•
1704.8 -	DRIVEN DEEP FOUNDATION ELEMENTS			
1	VERIFY ELEMENT MATERIALS, SIZES AND LENGTHS COMPLY WITH THE REQUIREMENTS.	Yes	x	-
2	DETERMINE CAPACITIES OF TEST ELEMENTS AND CONDUCT ADDITIONAL LOAD TESTS, AS REQUIRED.	Yes	x	•
3	INSPECT DRIVING OPERATIONS AND MAINTAIN COMPLETE AND ACCURATE RECORDS FOR EACH ELEMENT.	Yes	x	-
4	VERIFY PLACEMENT LOCATIONS AND PLUMBNESS, CONFIRM TYPE AND SIZE OF HAMMER, RECORD NUMBER OF BLOWS PER FOOT OF PENETRATION, DETERMINE REQUIRED PENETRATIONS TO ACHIEVE DESIGN CAPACITY, RECORD TIP AND BUTT ELEVATIONS AND DOCUMENT ANY DAMAGE TO FOUNDATION ELEMENT.	Yes	x	-
5	FOR STEEL ELEMENTS, PERFORM ADDITIONAL SPECIAL INSPECTIONS IN ACCORDANCE WITH SECTION 1704.3.	No	-	-
6	FOR CONCRETE ELEMENTS AND CONCRETE-FILLED ELEMENTS, PERFORM TESTS AND ADDITIONAL SPECIAL INSPECTIONS IN ACCORDANCE WITH SECTION 1704.4.	No	-	-
7	FOR SPECIALTY ELEMENTS, PERFORM ADDITIONAL INSPECTIONS AS DETERMINED BY THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE.	No	-	-
1704.9 -	CAST-IN-PLACE DEEP FOUNDATION ELEMENTS			
1	INSPECT DRILLING OPERATIONS AND MAINTAIN COMPLETE AND ACCURATE RECORDS FOR EACH ELEMENT.	No	-	-
2	VERIFY PLACEMENT LOCATIONS AND PLUMBNESS, CONFIRM LELMENT DIAMETERS, BELL DIAMETERS (IE APPLICABLE), LENGTHS, EMBEDMENT INTO BEDROCK (IF APPLICABLE) AND ADEQUATE END-BEARING STRATA CAPACITY, RECORD CONCRETE OR GROUT VOLUMES.	No	-	-
	FOR CONCRETE ELEMENTS, PERFORM TESTS AND ADDITIONAL SPECIAL INSPECTIONS IN ACCORDANCE WITH SECTION 1704.4.	No	-	-
1	INSTALLATION OF OPEN-WEB STEEL JOISTS AND JOIST	No		
	GIRDERS INCLUDING END CONNECTION AND BRIDGING.			

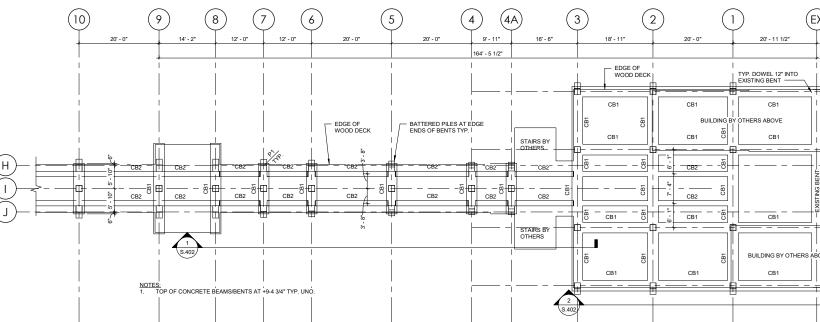




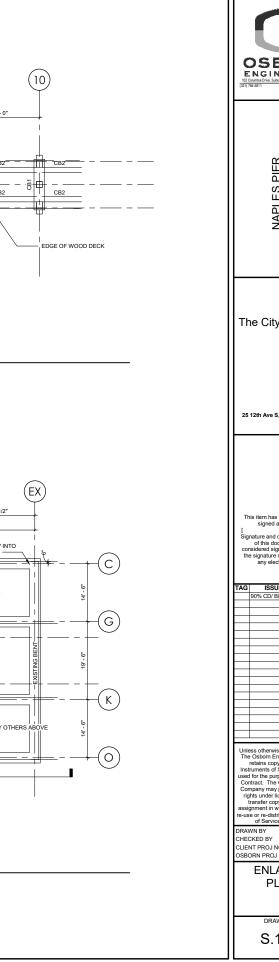




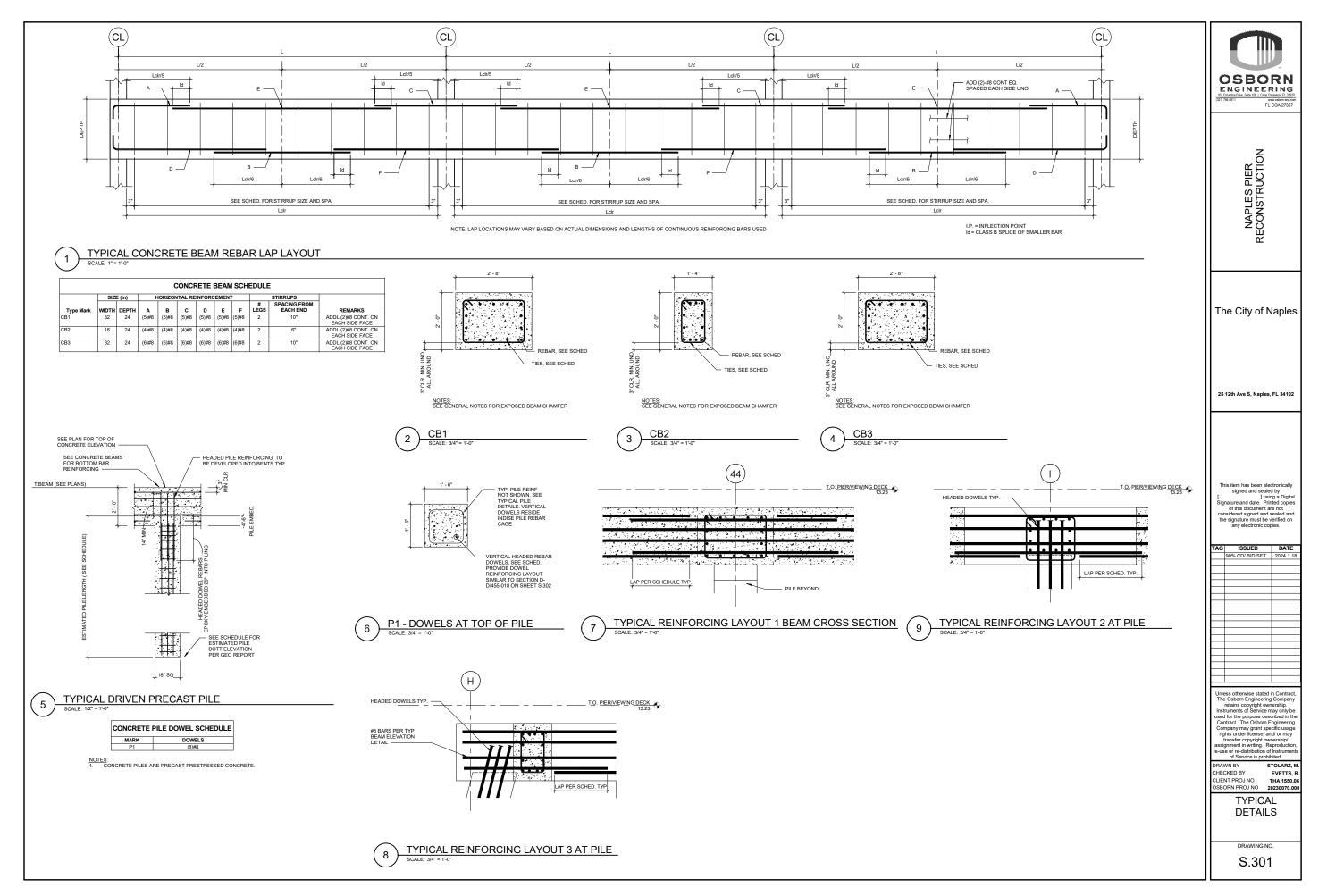
1 ENLARGED FRAMING PLAN 3 SCALE: 3/32" = 1'-0"

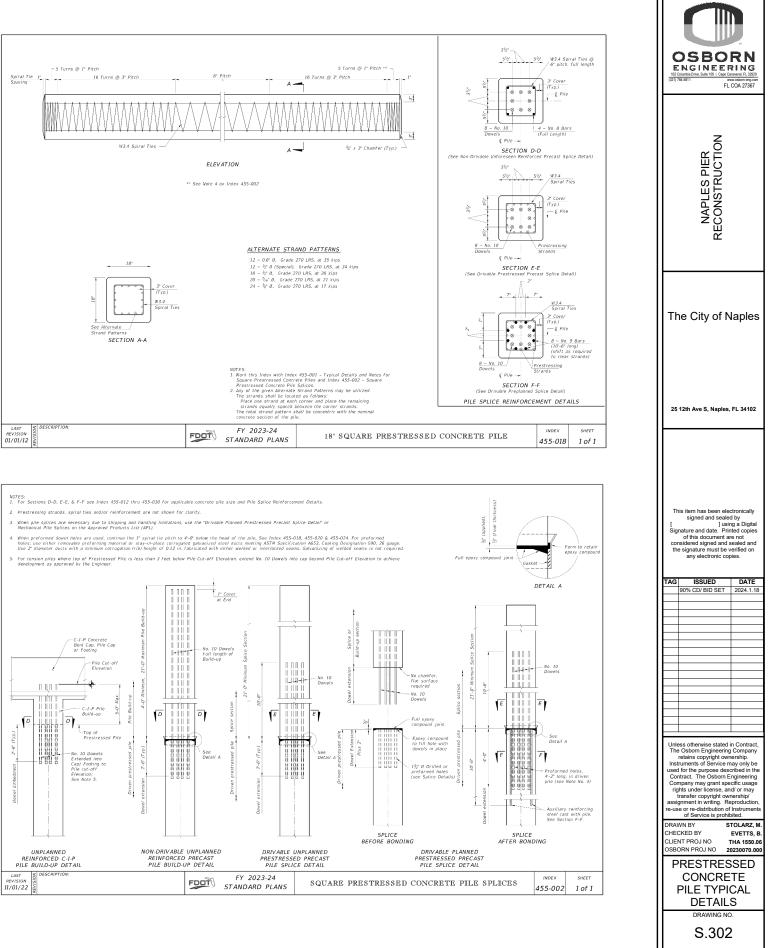


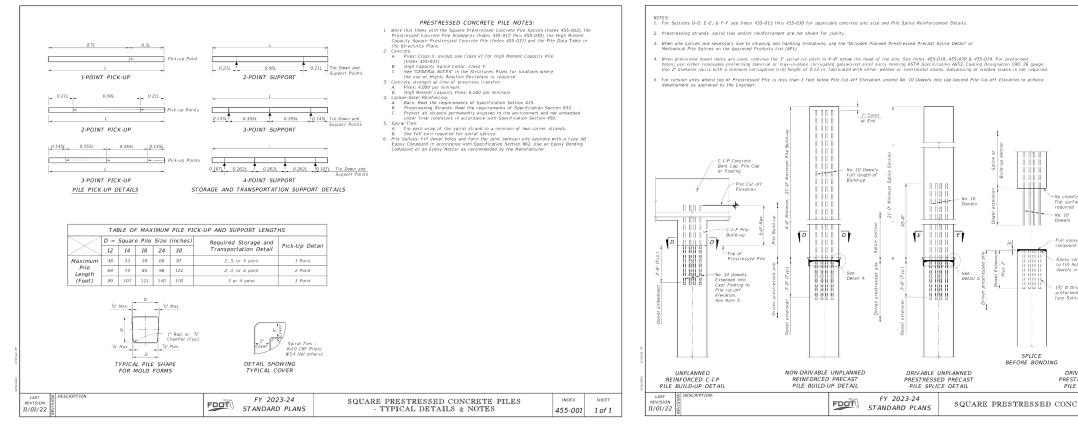
2 ENLARGED FRAMING PLAN 4 SCALE: 3/32" = 1'-0"



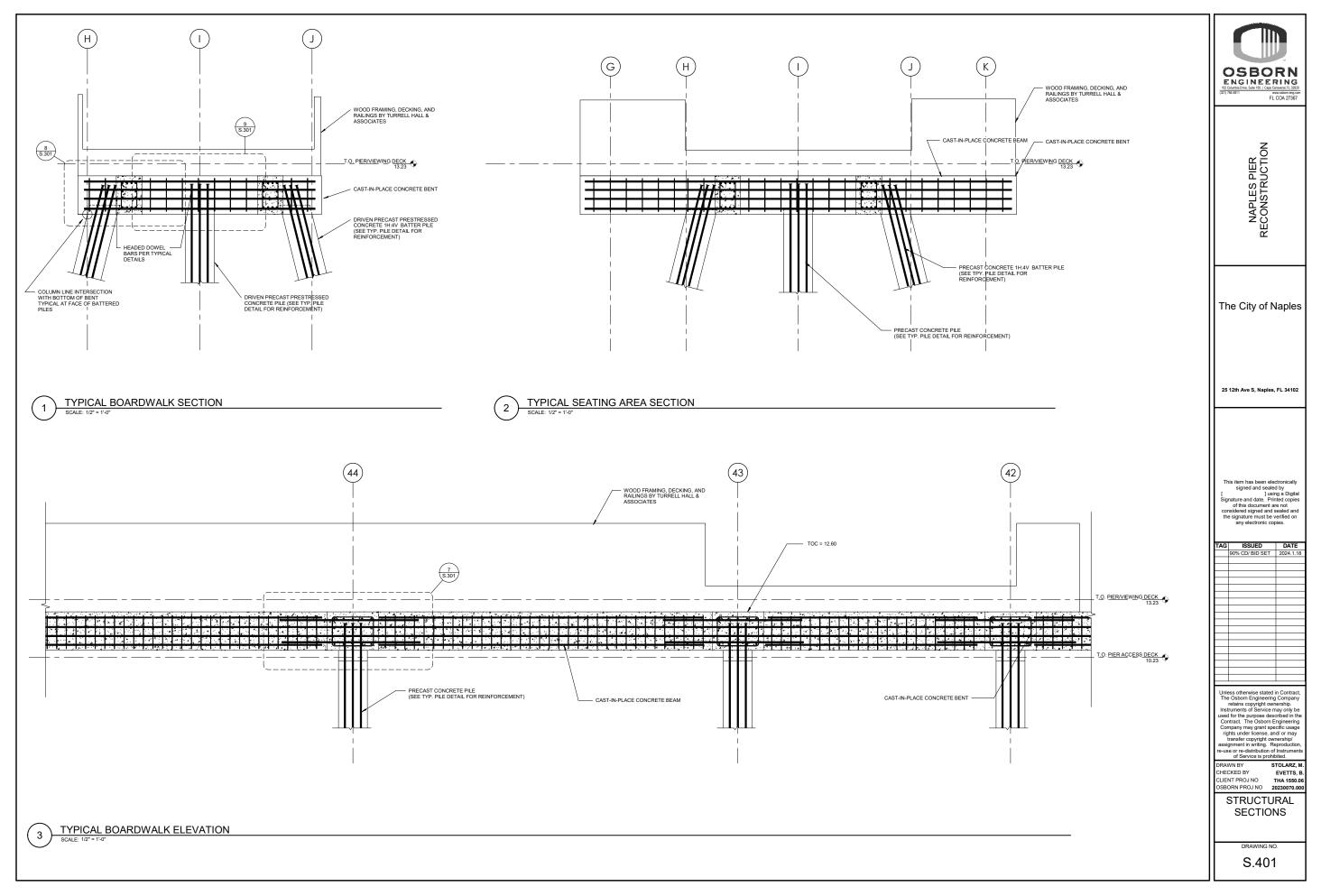
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		DRAWING NO).			

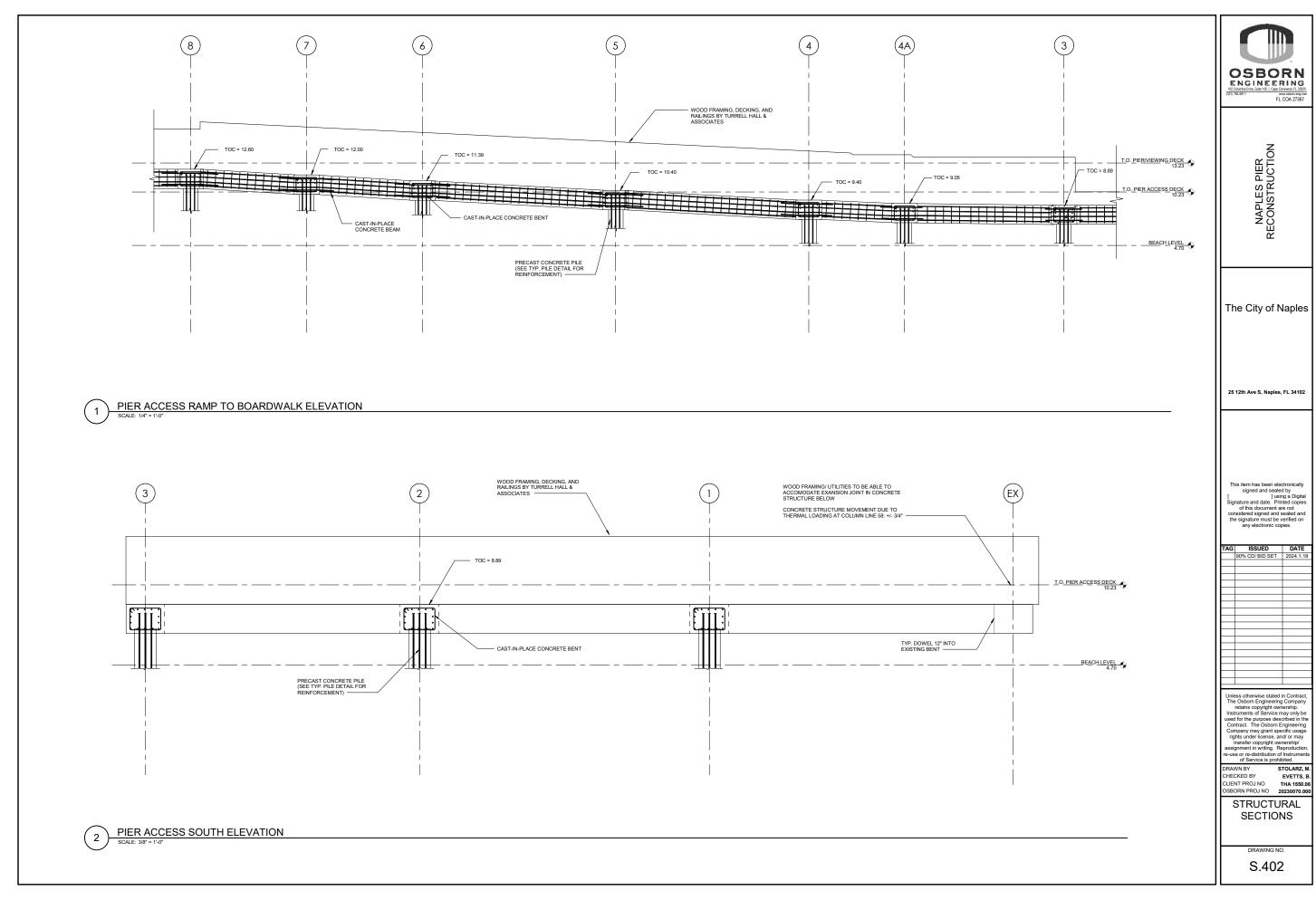






24-011 Naples Pier Reconstruction - ITB





SHEET INDEX

3

ELECTRICAL

E0100 COVER SHEET

E0101 EQUIPMENT SPECIFICATIONS

E0600 E0601

1

E0601

SINGLE LINE DIAGRAM W/LOAD CALCULATIONS PLAN VIEW LAYOUT PG.1 PLAN VIEW LAYOUT PG.2

2

3

2



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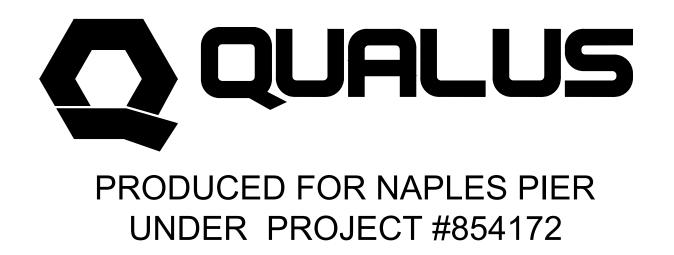
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24-011 Naples Pier Reconstruction - ITB

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	G)							DATE	DESIGNED MB 12.27.23	DRAWN MB 12.27.23	CHECKED RU 01.02.23	APPROVED REV.APP.
F					5011		ISSUED		FOR		KEVIEW	
E		QUALUS	FAIRFIELD	8490 SEWARD RD.	FAIRFIELD, OH. 45011					JL		
			U	Ŋ			Ш	NONE		VS CONFIDENTI	OR DISCLOSED	JUALUS.
[D						FULL SIZE PLOT SCALE	24X36		THIS DRAWING IS THE PROPERTY OF QUALUS AND CONTAINS CONFIDENTIAL	INFORMATION WHICH MUST NOT BE DUPLICATED, USED, OR DISCLOSED	WITHOUT EXPRESS WRITTEN PERMISSION FROM QUALUS.
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DECK LIGHTING:

2

Volt Electrical Deck LedLight or Approved Equivalent

Volt Led Lamps: Bi Pin Series Turtle Safe Lamps. Deck Light -600Series.

Size: $3\frac{3}{8}$ " Diameter

·Count: 318 Unit.

·Input Voltage/Frequency: 11-21 VAC/60Hz 590nm-605nm. Amber LED.

Input Power and Current: 3.0W.

ROOF LIGHTING:

DURAGUARD Outdoor LED Lighting or Approved Equivalent

DURAGUARD Model: VB53Q

·Size: 16 " Diameter

·Count: 48 Unit.

·Input Voltage/Frequency: 120-277 VAC/60Hz

·Input Power and Current: 23 W 1400K color temperature..

CLEANING STATION LIGHTING: BEACHSIDE LIGHTING or Approved Equivalent

Model: L011-CM, GU 5.3 MR16 LED

•Size: 2.4" dia. body x 4.75" dia. base x 4.7"

·Count: 4 Unit.

·Input Voltage/Frequency: 12 VAC/60Hz

Input Power and Current: 5 W, AMBER (1500K TURTLE FRIENDLY).

Volt Pro: 900Watt 12-22V Multitap Transformer.

·Location: As per THA and Qualus Plan.

·Count: 4 unit.

City of Naples

·Dimensional Footprint: 18"X10"X8".

•Equipment Specifications:

- UL LISTED, NEMA 4X Suitable for coastal environments per IEEE C57.12.29.
- White Powder Coat Finish, 316L Stainless Steel. 0
- 120 V/12-22V, 900W, 60Hz Frequency. 0

EQUIPMENT SPECIFICAT

PANEL BOARD #1

·Location: Restroom Building.

·Count: One Unit.

·Dimensional Footprint: To be de

·Equipment Specifications.

- UL LISTED, NEMA 4X Suita
- White Powder Coat Finish,
- 240/120 V 4W, 60Hz Freque

PANEL BOARD #2

·Location: Middle Pavilion

Count: One Unit.

·Dimensional Footprint: To be de

·Equipment Specifications.

- o UL LISTED, NEMA 4X Suita
- White Powder Coat Finish, 3 0
- 0 240/120 V 4W, 60Hz Freque

RECEPTACLES:

Marina Electrical Equipm

Model: Duplex water res

·Size: Standard Duplex size

·Count: 12 Unit.

Input Voltage/Frequency: 125 VAC

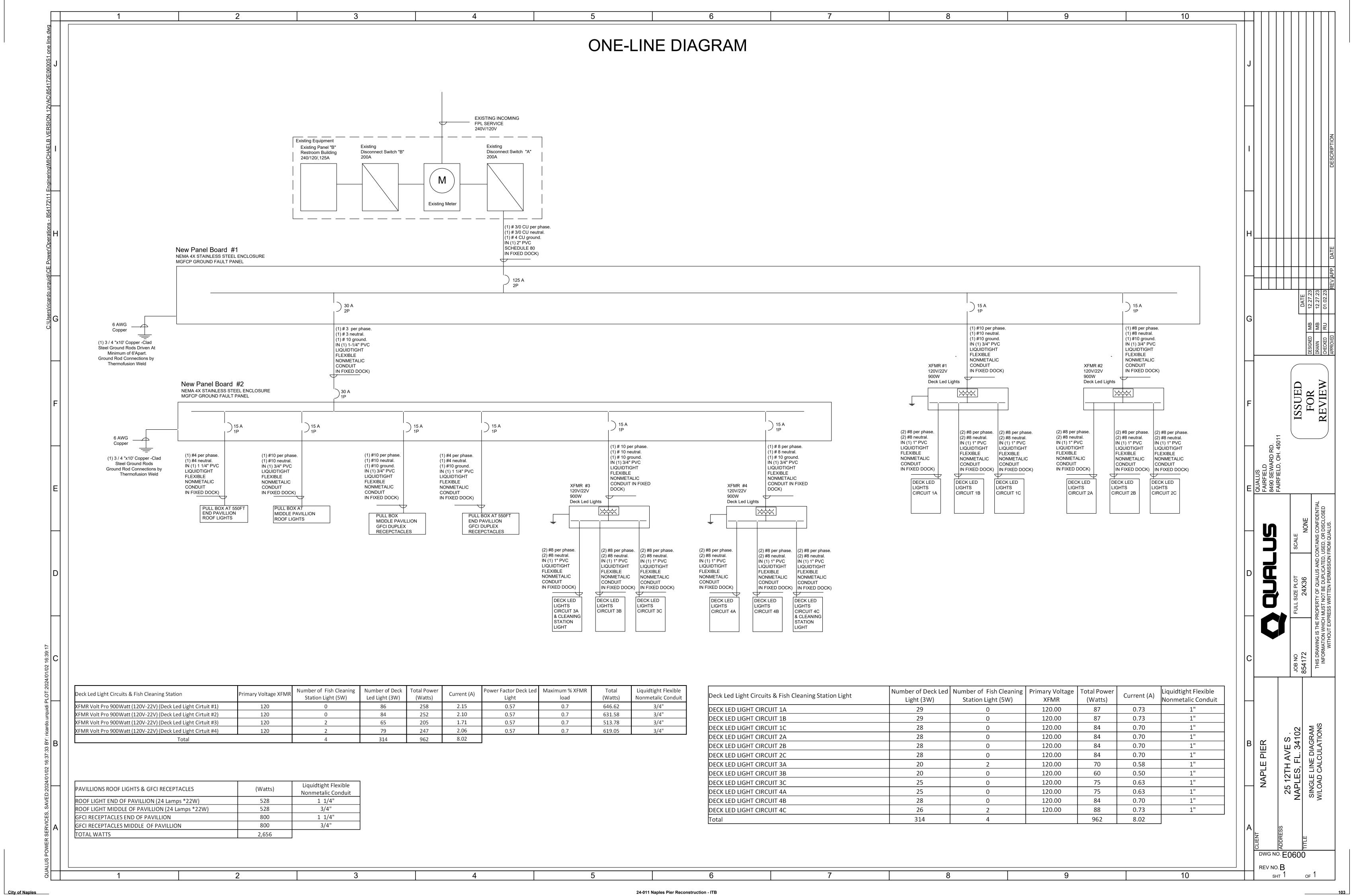
·Input Current: 20 A

Installation Details: Transformers/Par Shall Be Installed with 316 S/S Faste Unit and the Mounting Surface. Unit shall be mounted 30 in above the landing stage and a minimum 12 in

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above the level of the deck.		NAPLE		25 12TH NAPLES	1	EQUIPMENT SPECIFICATION	
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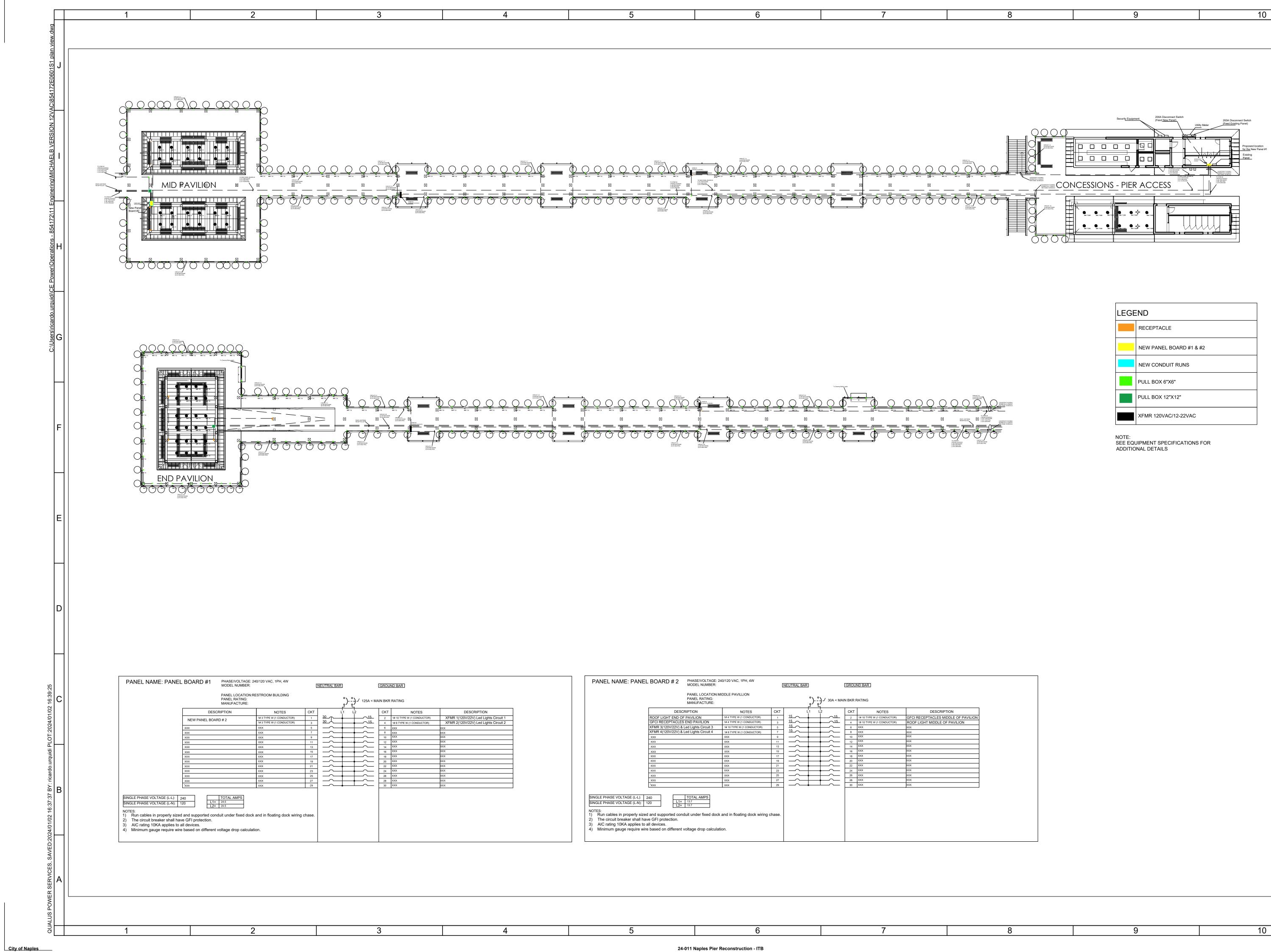
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t (A)	Power Factor Deck Led Light	Maximum % XFMR load	Total (Watts)	Liquidtight Flexible Nonmetalic Conduit
5	0.57	0.7	646.62	3/4"
C	0.57	0.7	631.58	3/4"
1	0.57	0.7	513.78	3/4"
6	0.57	0.7	619.05	3/4"
2				

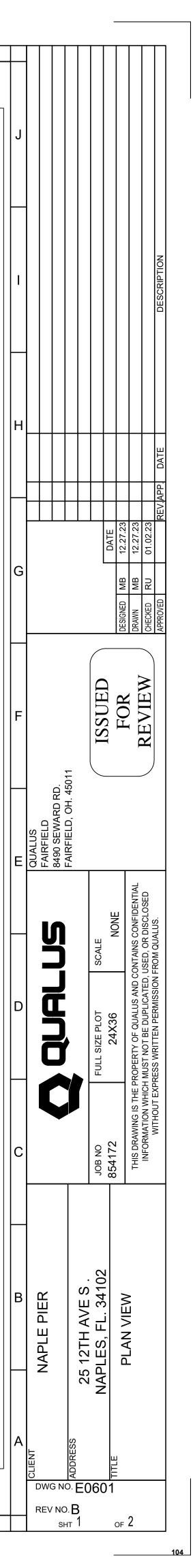
Deck Led Light Circuits & Fish Cleaning Station Light	Number of Deck Lee Light (3W)
DECK LED LIGHT CIRCUIT 1A	29
DECK LED LIGHT CIRCUIT 1B	29
DECK LED LIGHT CIRCUIT 1C	28
DECK LED LIGHT CIRCUIT 2A	28
DECK LED LIGHT CIRCUIT 2B	28
DECK LED LIGHT CIRCUIT 2C	28
DECK LED LIGHT CIRCUIT 3A	20
DECK LED LIGHT CIRCUIT 3B	20
DECK LED LIGHT CIRCUIT 3C	25
DECK LED LIGHT CIRCUIT 4A	25
DECK LED LIGHT CIRCUIT 4B	28
DECK LED LIGHT CIRCUIT 4C	26
Total	314

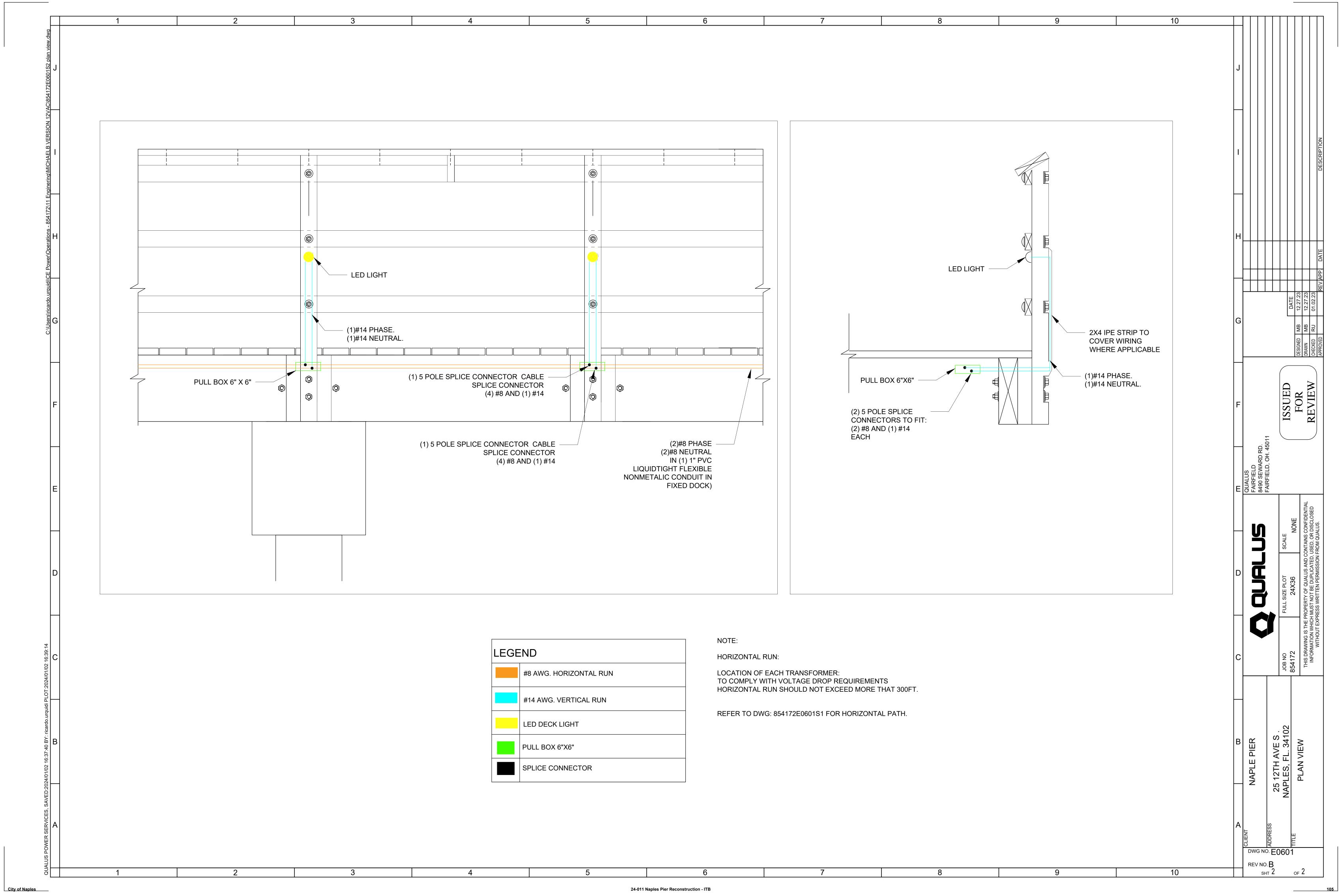


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24-011 Naples Pier Reconstruction - ITB

	NEW PANEL BOARD #1 & #2
,	NEW CONDUIT RUNS
	PULL BOX 6"X6"
	PULL BOX 12"X12"
	XFMR 120VAC/12-22VAC





LEGE	IND
	#8 AWG. HORIZONTAL RUN
	#14 AWG. VERTICAL RUN
	LED DECK LIGHT
	PULL BOX 6"X6"
	SPLICE CONNECTOR



TURRELL, HALL & ASSOCIATES, INC.

MARINE & ENVIRONMENTAL CONSULTING TODD T. TURRELL, P.E. 3584 EXCHANGE AVE. NAPLES FL 34104 TEL: (239)643-0166

FAX: (239)643-6632 EMAIL: TUNE@THANAPLES.COM

MHK ARCHITECTURE ARCHITECTS

MAUREEN MINKER 2059 TAMIAMI TRAIL EAST NAPLES FL 34112 TEL: (239)331-7092 EMAIL: MMINKER@MHKARCHITECTURE.COM

HUMISTON AND MOORE ENGINEERS CONSULTING COASTAL ENGINEERS

MARC J. DAMON, P.E. BRETT MOORE, P.E. 5679 STRAND CT, NAPLES FL 34110 TEL: (239)594-2021 FAX: (239)594-2025 EMAIL: MDAMON@HUMISTONANDMOORE.COM

NAPLES PIER RECONSTRUCTION

25 12th Ave S., Naples FL 34102

NOVA GEOTECHNICAL ENGINEERING ANDY ALBERDI, P.E.

HEADQUARTERS: 3900 KENNESAW 75 PARKWAY SUITE 100 KENNESAW, GA 30144 **REGIONAL OFFICE** 4524 OAK FAIR BLVD. STE 200, TAMPA FL 33610

TEL: (813)623-3100 FAX: (770)425-1113 EMAIL: AALBERDI@USANOVA.COM

OSBORN ENGINEERING

STRUCTURAL ENGINEERING BYRON EVETTS, P.E. MATT FURJANIC, P.E. REYNALDO BUENCAMINO, P.E. AARON LOBAS HEADQUARTERS: 1111 SUPERIOR AVE, SUITE 2100 CLEVELAND, OH 44114 **REGIONAL OFFICE:** 102 COLUMBIA DR STE 105, CAPE CANAVERAL FL 32920 TEL: (321)328-0570 EMAIL: BEVETTS@OSBORN-ENG.COM

QUALUS

ELECTRICAL ENGINEERING NICK YONNONE SETH KRAVETZ DAVID MINSHALL ROBERT BORDAS HEADQUARTERS: 8490 SEWARD RD. FAIRFIELD, OH 45011 **REGIONAL OFFICE:** 100 COLONIAL CENTER PKWY, STE 400, LAKE MARY FL 32746 TEL: (904)891-4943 EMAIL: NICK.YONNONE@QUALUSCORP.COM

24-011 Naples Pier Reconstruction - ITB

SELECT STRUCTURAL STRUCTURAL ENGINEERING

NPS CONSULTING

ENGINEERING & REPRESENTATION

EMAIL: NICK@NPSCONSULTINGLLC.COM

NICHOLAS P. STEWART

CAPE CORAL, FL 33904

TEL: (239)677-3004

MECHANICAL, ELECTRICAL, PLUMBING

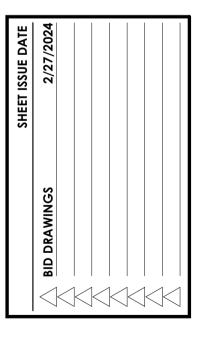
2534 SE SANTA BARBARA PL, SUITE 201

SHAWN ANDERSON, P.E., S.E. 12573 NEW BRITTANY BLVD. FORT MYERS, FL 33907 TEL: (239)210-5090 EMAIL: SHAWN@SELECTSTRUCTURAL.COM

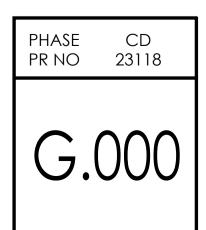


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FLORIDA SEAL Reg# Ar 16971



COVER	SHEET



ABBREVIATIONS:

ABV ABOVE AFF ABOVE FINISHED EF EACH FACE FLOOR ASC ABOVE SUSPENDED CEILING ACC ACCESS AP ACCESS PANEL ACT ACOUSTICAL PANEL ADH ADHESIVE ADJ ADJACENT ADJT ADJUSTABLE AGG AGGREGATE A/C AIR CONDITIONING ALT ALTERNATE ALUM ALUMINUM AB ANCHOR BOLT ANOD ANODIZED APX APPROXIMATE AD AREA DRAIN ASPH ASPHALT AT ASPHALT TILE AUTO AUTOMATIC BSMT BASEMENT BRG BEARING BPL BEARING PLATE BM BENCH MARK BET BETWEEN BVL BEVELED BIT BITUMINOUS BLK BLOCK BLKG BLOCKING BD BOARD BS BOTH SIDES **BW BOTH WAYS** BOT BOTTOM BRK BRICK BRZ BRONSE BLDG BUILDING BUR BUILT UP ROOFING CAB CABINET CPT CARPET (ED) CSMT CASEMENT CI CAST IRON CIPC CAST-IN-PLACE CONCRETE CST CAST STONE CB CATCH BASIN CLG CEILING CHT CEILING HEIGHT CEM CEMENT CM CENTIMETER(S) CER CERAMIC CT CERAMIC TILE CMT CERAMIC MOSAIC FUT FUTURE (TILE) CHAM CHAMFER CIR CIRCLE CLR CLEAR (ANCE) COL COLUMN COMB COMBINATION CONC CONCRETE CMU CONCRETE MASONRY UNIT CONST CONSTRUCTION CONT CONTINUOUS OR GB GRAB BAR CONTINUE CONTR CONTRACT (OR) CLL CONTRACT LIMIT CJ CONTROL JOINT CG CORNER GUARD CORR CORRUGATED CFL COUNTER FLASHING HDR HEADER CRS COURSE(S) CF CUBIC FOOT CY CUBIC YARD DP DAMPPROOFING DL DEAD LOAD DEMO DEMOLISH, DEMOLITION DFE DESIGN FLOOD ELEVATION DTL DETAIL DIAG DIAGONAL DIAM DIAMETER DIM DIMENSION DIV DIVISION DR DOOR DA DOUBLEACTING DH DOUBLE HUNG DOWNSPOUT DRAIN DWR DRAWER DF DRINKING FOUNTAIN

EA EACH FAST ELEC ELECTRIC (AL) EP ELECTRIC PANELBOARD EWC ELECTRIC WATER COOLER EL ELEVATION ELEV ELEVATOR EMER EMERGENCY EQ EQUAL EST ESTIMATE EXCA EXCAVATE EXH EXHAUST EXTG EXISTING EB EXPANSION BOLT EXP EXPOSED EXT EXTERIOR EXS EXTRA STRONG FB FACE BRICK FOC FACE OF CONCRETE FOF FACE OF FINISH FOM FACE OF MASONRY FOS FACE OF STUDS FF FACTORY FINISH FAS FASTEN FASTENER FBD FIBERBOARD FGL FIBERGLASS FIN FINISH (ED) FFE FINISHED FLOOR ELEVATION FFL FINISHED FLOOR LINE FA FIRE ALARM FBRK FIRE BRICK FE FIRE EXTINGUISHER FEC FIRE EXTINGUISHER CABINET FHS FIRE HOSE STATION FPL FIREPLACE FP FIREPROOF FRT FIRE-RETARDANT FLG FLASHING FLX FLEXIBLE FLR FLOOR (ING) FLCO FLOOR CLEANOUT FD FLOOR DRAIN FPL FLOOR PLATE FLUR FLUORESCENT FTG FOOTING FND FOUNDATION FR FRAME (D), (ING) FRA FREASH AIR FS FULL SIZE FBO FURNISHED BY OTHERS FUR FURRED (ING) GA GAGE, GAUGE GALV GALVANIZED GI GALVANIZED IRON GP GALVANIZED PIPE GSS GALVANIZED STEEL SHEET GC GENERAL CONTRACTOR PNT PAINT (ED) GL GLASS, GLAZING GLB GLASS BLOCK GLF GLASS FIBER GD GRADE, GRADING GVL GRAVEL GT GROUT GYP GYPSUM DRY WAL **HBD HARDBOARD** HDW HARDWARE HWD HARDWOOD HTG HEATING HVAC HEATING/VENTILATING/ AIR CONDITIONING HT HEIGHT HC HOLLLOW CORE HM HOLLOW META HOR HORIZONTAL HB HOSE BIBB INCIN INCINERATOR INCL INCLUDE (D), (ING) ID INSIDE DIAMETER INSUL INSULATE (D), (ING) INT INTERIOR INTM INTERMEDIATE INV INVERT IP IRON PIPE IPS IRON PIPE SIZE JC JANITOR'S CLOSET JT JOINT JF JOINT FILLER

KIT KITCHEN RAD RADIUS KO KNOCKOUT **RDWD REDWOOD** LBL LABEL REF REFERENCE LAB LABORATORY LB LAG BOLT LAM LAMINATE (ED) LAV LAVATORY LH LEFT HAND L LENGTH LT LIGHT LW LIGHTWEIGHT LWC LIGHTWEIGHT CONCRETE LMS LIMESTONE LTL LINTEL LL LIVE LOAD LVR LOUVER LPT LOW POINT MH MANHOLE MFR MANUFACTURE (ER) MAS MASONRY MO MASONRY OPENING MTL MATERIAL (S) MAX MAXIMUM MECH MECHANIC (AL) MC MEDICINE CABINET MED MEDIUM MBR MEMBER **MMB MEMBRANE** MET METAL M METER (S) SH MM MILLIMETER (S) MIN MINIMUM MIR MIRROR MISC MISCELLANEOUS SP MOD MODULAR MLD MOLDING MOULDING MR MOP RECEPTOR MT MOUNT (ED), (ING) MOV MOVABLE MULL MULLION NAT NATURAL NRC NOISE REDUCTION STOR STORAGE COEFFICIEANT SD NOM NOMINAL NMT NONMETALIC N NORTH NIC NOT IN CONTRACT SUSP SUSPENDED NTS NOT TO SCALE OC ON CENTER (S) OPG OPENING OPP OPPOSITE OPH OPPOSITE HAND OPS OPPOSITE SURFACE TPTN TOILET PARTITION OD OUTSIDE DIAMETER TPD TOILET PAPER OA OVERALL OH OVERHEAD PNL PANEL PB PANIC BAR ΤG PTD PEPER TOWEL DISPENSER PTR PAPER TOWE RECEPTOR τw PAR PARALLEL PK PARKING PBD PARTICLE BOARD PTN PARTITION PV PAVE (D), (ING) PVMT PAVEMENT PED PEDESTAL PERF PERFORATE (D) PERI PERIMETER PLAS PLASTER P.L. PLASTIC LAMINATE VERT VERTICAL PL PLATE PG PLATE GLASS PW PLWOOD PT POINT PVC POLYVINYL CHLORIDE PTC POST-TENSIONED CONCRETE PCF POUNDS PER CUBIC FOOT PLF POUNDS PER LINEAL FOOT PSF POUNDS PER SQUAREWS WATER REPELLENT FOOT PSI POUNDS PER SQUARE INCH INCH INCH PCC PRECAST CONCRETEW WEST W WIDTH, WIDE PFB PREFABRICATE (D) PFN PREFINISHED PSC PRESTRESSED CONCRETE PL PROPERTY LINE QT QUARRY TILE WB

REFR REFRIGERATOR REG REGISTER **REINF REINFORCE (D)** (ING) RCP REINFORCED **CONCRETE PIPE** RESIL RESILIENT RET RETURN RA RETURN AIR **REV REVISION (S)**, REVISED RH RIGHT HAND ROW RIGHT OF WAY RISER RD ROOF DRAIN **RFG ROOFING** RM ROOM RSC ROUGH SAWN CEDAR RLK ROWLOCK SFGL SAFETY GLASS SCH SCHEDULE SCN SCREEN STG SEATING SECTION SECT SSD SEE STRUCTURAL DRAWINGS SHTG SHEATHING SHT SHEET SG SHEET GLASS SHELF, SHELVING SIM SIMILAR SLDC SOLDIER COURSE SC SOLID CORE SOUNDPROOF SOUTH SPK SPEAKER SPL SPECIAL SPEC SPECIFICATION (S SQ SQUARE STAINLESS STEEL STD STANDARD STA STATION STL STEEL STORM DRAIN STRUCT STRUCTURAL SCT STRUCTURAL CLAY TILE SYS SYSTEM TEL TELEPHONE TV TELEVISION THICK (NESS) ТНК THR THRESHOLD DISPENSER TOL TOLERANCE T&G TONGUE & GROOVE TC TOP OF CURB TOP OF GRADE TOP OF PAVEMEN TSL TOP OF SLAB TOP OF STEEL TOP OF WALL TOWEL BAR TBD TO BE DETERMINED TREAD TYP TYPICAL UNFIN UNFINISHED UR URINAL VB VAPOR BARRIER VAR VARNISH VNR VENEER VG VERTICAL GRAIN VIF VERIFY IN FIELD VIN VINYL VB VINYL BASE VT VINYL TILE WSCT WAINSCOT WTW WALL TO WALL WH WALL HUNG WATER HEATER WC WATER CLOSET WP WATERPROOFING WDW WINDOW WG WIRED GLASS WM WIRE MESH W/O WITHOUT WD WOOD

WOOD BASE

WPT WORKING POINT

WI WROUGHT IRON

GENERAL NOTES:

I. IT IS THE INTENT OF THESE CONTRACT DOCUMENTS TO DEFINE AND DESCRIBE A COMPLETE FINISHED AND FULLY FUNCTIONING FACILITY. ANY PRODUCT, MATERIAL, SYSTEM, EQUIPMENT, OR ASSEMBLY WHICH NORMALLY WOULD BE REQUIRED TO MEET THIS REQUIREMENT SHALL BE PROVIDED AS IF SPECIFICALLY NOTED.

2. WHEN WORK IS NOT SPECIFICALLY NOTED BUT IS REQUIRED TO COMPLETE THE PROJECT, IT SHALL BE PROVIDED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.

3. THE DOCUMENTS ARE DIAGRAMMATIC AND SHALL NOT BE SCALED. ADDITIONAL DATA SHALL BE OBTAINED FROM THE ARCHITECT THROUGH WRITTEN CLARIFICATION ONLY. VERIFY ALL EXISTING CONDITIONS, ELEVATIONS, AND DIMENSIONS BEFORE PROCEEDING WITH ANY PORTION OF ANY WORK.

4. ALL WORK AS OUTLINED IN THESE DOCUMENTS SHALL CONFORM TO THE APPLICABLE CODES AND ORDINANCES IN EFFECT AT THE TIME THESE DOCUMENTS WERE PREPARED. IN THE EVENT OF A CONFLICT, THE MORE STRINGENT REQUIREMENTS SHALL GOVERN.

5. CONTRACTOR SHALL VISIT THE JOB SITE AND BECOME FAMILIAR WITH ALL EXISTING CONDITIONS WHICH MAY AFFECT THE BID.

6. CONTRACTOR SHALL BE EXPERIENCED IN THIS TYPE OF WORK. NO ALLOWANCES WILL BE MADE FOR LACK OF EXPERIENCE.

7. CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONARY MEASURES TO PROTECT THE PUBLIC AND ADJACENT PROPERTIES FROM DAMAGE THROUGHOUT THE CONSTRUCTION.

8. ANY EXISTING UTILITIES TO BE ABANDONED SHALL BE PROPERLY DISCONNECTED, PLUGGED, OR CAPPED, AS REQUIRED BY CODE.

9. DAMAGED OR DISRUPTED EXISTING CONDITIONS INCLUDING BUT NOT LIMITED TO LANDSCAPING, LIGHTING, IRRIGATION, PEDESTRIAN AND VEHICLE ACCESS SHALL BE REPLACED AT THE END OF CONSTRUCTION TO THE SAME STANDARDS OF QUALITY AS EXISTED PRIOR TO CONSTRUCTION.

IO.DISRUPTED ELECTRICAL AND WATER LINES SHALL BE RE-ROUTED DURING CONSTRUCTION AND ARE TO REMAIN IN CONTINUOUS SERVICE UNLESS OTHERWISE INDICATED OR INSTRUCTED.

11.NO CHANGES, MODIFICATIONS OR DEVIATIONS SHALL BE MADE FROM THE DRAWINGS OR SPECIFICATIONS WITHOUT FIRST SECURING WRITTEN DIRECTION FROM THE ARCHITECT.

12. WHERE LACK OF INFORMATION OR DISCREPANCY EXISTS IN THE DRAWINGS OR SPECIFICATIONS, REQUEST WRITTEN INTERPRETATION FROM THE ARCHITECT BEFORE PROCEEDING.

13.UNLESS OTHERWISE NOTED, ELECTRICAL CONDUITS, PLUMBING LINES, ETC SHALL BE RUN CONCEALED AND FRAMING SHALL BE CORRECTLY SIZED TO ACCOMPLISH THIS WITHOUT CREATING VARIATIONS IN THE WALL PLANE.

14.PROVIDE ADEQUATE CONCEALED BLOCKING AND ANCHORING FOR ALL CEILING AND WALL MOUNTED EQUIPMENT, HARDWARE, AND ACCESSORIES.

15. WHEN A PRODUCT, SYSTEM OR ASSEMBLY IS CALLED FOR, ALL NECESSARY PARTS AND MATERIALS REQUIRED FOR A COMPLETE AND FULLY OPERATIONAL SYSTEM SHALL BE PROVIDED AND INSTALLED ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS.

16.PRIOR TO PROCEEDING WITH WORK, CONTRACTOR SHALL COORDINATE WITH EACH TRADE THE LOCATIONS OF SLEEVES OR ACCESSORIES INVOLVING OTHER TRADES.

17. CONTRACTOR SHALL GUARANTEE ALL MATERIALS AND WORKMANSHIP FURNISHED UNDER THIS CONTRACT FOR A MINIMUM PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE OF WORK. ANY DEFECTS DEVELOPING WITHIN THIS PERIOD TRACEABLE TO MATERIALS OR WORKMANSHIP PROVIDED OR PERFORMED BY THE CONTRACTOR, SHALL BE MADE GOOD AT THE EXPENSE OF THE CONTRACTOR. THE CONTRACTOR SHALL ACCEPT AND FULLY UNDERSTAND THIS PROVISION PRIOR TO THE CONTRACT BEING AWARDED. NO CLAIM FOR EXTRA COMPENSATION WILL BE ALLOWED FOR CORRECTION OF FAULTY WORK OR DEFECTIVE MATERIALS. AT ANY TIME DURING THE CONSTRUCTION PERIOD, OWNER'S REPRESENTATIVES AND THE ENGINEER RETAIN THE RIGHT TO REQUIRE THE CONTRACTOR TO REMOVE AND REINSTALL ANY EQUIPMENT OR MATERIALS NOT FOLLOWING THE STANDARDS AS PRESENTED HEREIN OR ON THE DRAWINGS AND AT NO COST TO THE THE OWNER.

SITE CONDITIONS 1. LOCATE, IDENTIFY, AND PROTECT ALL EXISTING UTILITIES ENCOUNTERED DURING THE WORK. IF ANY, NOTIFY UTILITY COMPANIES OF IMPENDING WORK.

2. ENSURE THAT ALL UTILITY AND OTHER SERVICES WHICH MAY BE DISTURBED DURING CLOSE EXCAVATION ARE TEMPORARILY STAYED AND BRACED IN POSITION DURING THE WORK.

3. PROVIDE SLEEVES APPROPRIATE TO CONSTRUCTION WHERE NEW PIPES, CONDUIT, AND DUCTS PENETRATE WALLS AND FLOORS. FILL VOIDS WITH FIRE SAFING INSULATION OR FOAM PENETRATION SEALANT.

4. PROGRESS CLEANING: REMOVE DEBRIS FROM INTERIOR OF BUILDING ON A DAILY BASIS AND STORE TEMPORARILY IN COMMERCIAL TRASH CONTAINERS. REMOVE DEBRIS FROM BUILDING SITE AT INTERVALS REQUIRED TO MINIMIZE OVERFLOW AND SPILLAGE. HANDLE HAZARDOUS, DANGEROUS, OR UNSANITARY WASTE MATERIALS SEPARATELY FROM OTHER WASTE BY CONTAINERIZING PROPERLY. DISPOSE OF MATERIAL IN A LAWFUL MANNER.

5. PROVIDE TEMPORARY TOILET FACILITIES FOR CONSTRUCTION USE. USE OF THE OWNERS TOILET FACILITIES WILL NOT BE PERMITTED.

FINAL COMPLETION

I . DO NOT BURN WASTE MATERIALS. DO NOT BURY DEBRIS OR EXCESS MATERIALS ON THE OWNER'S PROPERTY. DO NOT DISCHARGE VOLATILE, HARMFUL OR DANGEROUS MATERIALS INTO DRAINAGE SYSTEMS. REMOVE WASTE MATERIALS FROM THE SITE AND DISPOSE IN A LAWFUL MANNER.

2. COMPLETE CLEANING OPERATIONS BEFORE REQUESTING INSPECTION FOR CERTIFICATION OF SUBSTANTIAL COMPLETION AND MAINTAIN BUILDING IN CLEANED CONDITION UNTIL FINAL COMPLETION

3. REMOVE TEMPORARY PROTECTION AND FACILITIES INSTALLED FOR PROTECTION OF THE WORK DURING CONSTRUCTION.

4. REMOVE LABELS, CLEAN GLASS SURFACES, AND DUST AND WIPE CLEAN ALL PRODUCTS, MATERIALS, SYSTEMS, FINISHES, EQUIPMENT, AND SURFACES.

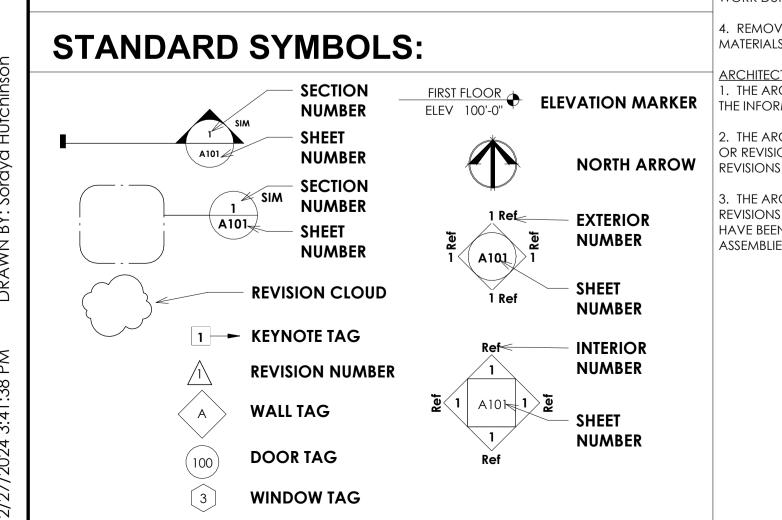
ARCHITECTS DISCLAIMER 1. THE ARCHITECTS CERTIFICATION OF THE DOCUMENTS IS LIMITED TO THE DOCUMENTS AND THE INFORMATION CONTAINED IN THE DOCUMENTS.

2. THE ARCHITECTS CERTIFICATION SHALL NOT EXTEND TO REVISIONS TO THE DOCUMENTS OR REVISIONS IN THE INFORMATION CONTAINED IN THE DOCUMENTS WHERE SUCH REVISIONS WERE NOT PERFORMED AND/OR AUTHORIZED IN WRITING BY THE ARCHITECT.

3. THE ARCHITECT SHALL NOT BE RESPONSIBLE FOR REVISIONS TO THE DOCUMENTS OR REVISIONS IN INFORMATION CONTAINED IN THE DOCUMENTS AND WHERE SUCH REVISIONS HAVE BEEN MADE BY OTHERS TO PRODUCTS, MATERIALS, FINISHES, DIMENSIONS, SYSTEMS, ASSEMBLIES, OR AESTHETIC INTENT.

DW DUMBWAITER

JST JOIST



PROJECT SUMMARY:

THIS IS A PERMIT APPLICATION FOR THE RECONSTRUCTION OF THE NAPLES PIER. LOCATED AT 25 12TH AVENUE SOUTH, NAPLES FL 34102. THE PROJECT WILL CONSIST OF: AN INTERIOR AND EXTERIOR RENOVATION OF THE EXISTING MEN'S AND WOMEN'S RESTROOMS; A CONCESSIONS AND STORAGE ADDITION TO THE MEN'S RESTROOM; A COVERED OPEN-AIR DINING PAVILION ADDITION TO THE WOMEN'S RESTROOM/SHOWERS; ADA ACCESSIBLE PIER DECKING TO MID-PAVILION OPEN-AIR structures with viewing/fishing platforms; and additional ada accessible PIER DECKING TO AN ELEVATED END SUNSET PAVILION WITH VIEWING / FISHING PLATFORM.

TERMITE PROTECTION:

TERMITE PROTECTION SHALL BE PROVIDED BY REGISTERED TERMITICIDES, INCLUDING SOIL APPLIED PESTICIDES, BAITING SYSTEMS, AND PESTICIDES APPLIED TO WOOD, OR OTHER APPROVED METHODS OF TERMITE PROTECTION LABELED FOR USE AS A PREVENTATIVE TREATMENT TO NEW CONSTRUCTION. UPON COMPLETION OF THE APPLICATION OF THE TERMITE PROTECTIVE TREATMENT, A CERTIFICATE OF COMPLIANCE SHALL BE ISSUED TO THE BUILDING DEPARTMENT BY THE LICENSED PEST CONTROL COMPANY THAT CONTAINS THE FOLLOWING STATEMENT: "THE BUILDING HAS RECEIVED A COMPLETE TREATMENT FOR THE PREVENTION OF SUBTERRANEAN TERMITES. TREATMENT IS IN ACCORDANCE WITH RULES AND LAWS ESTABLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES." A COPY SHALL BE POSTED NEAR THE WATER HEATER OR ELECTRIC PANEL.

- 2. Condensate and roof downspouts shall discharge at least 1'-0" Away FROM BUILDING SIDE WALLS 3. IRRIGATION & SPRINKLER SYSTEMS, INCLUDING ALL RISERS AND SPRAY HEADS, SHALL
- NOT BE INSTALLED WITHIN 1'-0" OF THE BUILDING SIDE WALLS. 4. TO PROVIDE FOR INSPECTION FOR TERMITE INFESTATION, CLEARANCE BETWEEN WALL COVERING AND FINAL EARTH GRADE SHALL NOT BE LESS THAN 6 INCHES. EXCEPTIONS:

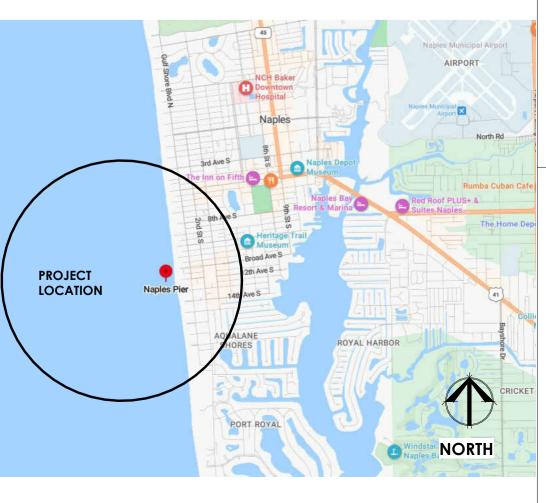
A. PAINT OR DECORATIVE CEMENTIOUS FINISH LESS THAN 5/8" THICK ADHERED DIRECTLY TO THE FOUNDATION WALL

- B. ACCESS OR VEHICLE RAMPS WHICH RISE TO THE INTERIOR FINISH FLOOR ELEVATION FOR THE WIDTH OF SUCH RAMPS ONLY. C. A 4-INCH INSPECTION SPACE ABOVE PATIO AND GARAGE SLABS AND ENTRY
- ARFAS. 5. INITIAL TREATMENT SHALL BE DONE AFTER ALL EXCAVATION AND BACK FILL IS COMPLETE. SOIL DISTURBED AFTER THE INITIAL TREATMENT SHALL BE RETREATED INCLUDING SPACES BOXED OR FORMED.
- BOXED AREAS IN CONCRETE FLOORS FOR SUBSEQUENT INSTALLATION OF TRAPS, ETC.. SHALL BE MADE WITH A PERMANENT METAL OR PLASTIC FORMS. PERMANENT FORMS MUST BE OF A SIZE AND DEPTH THAT WILL ELIMINATE THE DISTURBANCE OF SOIL AFTER THE INITIAL TREATMENT.
- . MINIMUM 6 MIL VAPOR RETARDER MUST BE INSTALLED TO PROTECT AGAINST RAINFALL DILUTION. IF RAINFALL OCCURS BEFORE VAPOR RETARDER PLACEMENT, RETREATMENT IS REQUIRED.
- . CONCRETE OVER POUR AND MORTAR ALONG THE FOUNDATION PERIMETER MUST BE REMOVED BEFORE EXTERIOR SOIL TREATMENT.
- . SOIL TREATMENT MUST BE APPLIED UNDER ALL EXTERIOR CONCRETE OR GRADE WITHIN 1'-0" OF THE STRUCTURES SIDEWALLS. 10. AN EXTERIOR VERTICAL CHEMICAL BARRIER MUST BE INSTALLED AFTER
- CONSTRUCTION IS COMPLETE INCLUDING LANDSCAPING AND IRRIGATION. ANY SOIL DISTURBED AFTER THE VERTICAL BARRIER IS APPLIED, SHALL BE RETREATED. 1 ALL BUILDINGS ARE REQUIRED TO HAVE PRE-CONSTRUCTION TREATMENT
- 12. AFTER ALL WORK IS COMPLETED, LOOSE WOOD AND FILL MUST BE REMOVED FROM BELOW AND WITHIN 1'-0" OF THE BUILDING. THIS INCLUDES ALL GRADE STAKES, TUB TRAP BOXES, FORMS, SHORING OR OTHER CELLULOSE CONTAINING MATERIAL 13. NO WOOD, VEGETATION, STUMPS, CARDBOARD, TRASH, ETC., SHALL BE BURIED

WITHIN 15'-0" OF ANY BUILDING OR PROPOSED BUILDING. MATERIAL LEGEND:

	BRICK	STRUCTURAL CONCRETE		GYP. BD.
	STEEL	CERAMIC TILE	\ge	LUMBER
	RIGID INSULATION	ALUMINUM		BLOCKING
	EARTH	PLYWOOD		FINSH WOO
>>>>	UNDISTURBED EARTH	SHINGLES	1	GLASS
	GRAVEL	SIDING		СМИ

PROJECT LOCATION MAP:



24-011 Naples Pier Reconstruction - ITB

CODE ANALYSIS: FBC 8TH ED 2023: FEMA INFORMATION

APPLICABLE CODES

- CITY OF NAPLES MUNICIPAL CODE

- FLORIDA BUILDING CODE 8TH EDITION (2023) - FLORIDA FIRE PREVENTION CODE 8TH EDITION (2023)
- FLORIDA BUILDING CODE / ACCESIBILITY 8TH EDITION (2023)
- FLORIDA MECHANICAL CODE 8TH EDITION (2023) - FLORIDA PLUMBING CODE 8TH EDITION (2023
- FLORIDA ENERGY CONSERVATION CODE 8TH EDITION (2023) - NATIONAL ELECTRIC CODE (2020) 25 12TH AVENUE SOUTH, NAPLES FL 34102 SITE ADDRESS: ZONING: EXISTING R1-15 / NO CHANGES FEMA FLOOD ZONE: VE 11 (2019) (CONCESSIONS) VE 13 (2019) (MID-PAVILION & END PAVILION) OCCUPANCY: ASSEMBLY A5 TYPE IV (HEAVY TIMBER) / TYPE III B UNPROTECTED BUILDING TYPE: NON-SPRINKLED Sprinkler

TOTAL OCCUPANT LOAD CALCULATION

(PER FBC 2023 TABLE 1004.5, NFPA 7.3.1.2)

(/		
CONCESSIONS (KITCHEN)	509 SF	(200 GROSS)	3 persons
CONCESSIONS (STORAGE)	60 SF	(300 GROSS)	1 PERSON
CONCESSIONS (WAITING)	294 SF	(5 NET)	59 PERSONS
CONCESSIONS (DINING)	643 SF	(15 NET)	43 PERSONS
PIER STORAGE	65 SF	(300 GROSS)	1 person
MEN'S RESTROOMS	613 SF	(50 GROSS)	13 persons
women's restroom	613 SF	(50 GROSS)	13 persons
SHOWERS	306 SF	(5 NET)	62 PERSONS
END PAVILION / DECK	3464 SF	(5 NET)	693 PERSONS
MID PAVILION 1 / DECK 1	2245 SF	(5 NET)	449 PERSONS
MID PAVILION 2 / DECK 2	2245 SF	(5 NET)	449 PERSONS
BUMPOUTS (16)	<u>81 SF</u>	<u>(5 NET) (16)</u>	<u>260 PERSONS</u>
		TOTAL	2,046 ALLOWED

ALLOWABLE AREA (PER FBC 2023 TABLE 506.2)

ALLOWED UNLIMITED PROPOSED (ENCLOSED, UNDER ROOF): MEN'S RESTROOM/CONCESSION AND STORAGE ADDITION 1247 SF WOMEN'S RESTROOM: 613 SF

<u>ALLOWABLE HEIGHT</u>

(PER FBC 2023 TABLE 504.3A) ALLOWED TYPE IV: 65', TYPE III B = 55' PROPOSED MAX. ROOF HEIGHT = 35'-2"

ALLOWABLE STORIES (PER FBC 2023 TABLE 504.4) ALLOWED UNLIMITED (TYPE IV AND TYPE III) PROPOSED

ALLOWABLE TRAVEL DISTANCE (PER FBC 2023 TABLE 1017.2) ALLOWED 200' PROPOSED 99'-8"

CORRIDOR WIDTH (PER FBC 2023 TABLE 1020.3) MINIMUM ALLOWED = 44" MINIMUM ALLOWED W/OCCUP. LOAD LESS THAN 50 = 36" PROPOSED 12' = 144" (PIER) CORRIDOR

<u>dead ends</u> (PER FBC 2023 TABLE 1020.5) ALLOWED 20' PROPOSED N/A

NUMBER OF EXITS (PER FBC 2023 TABLE 1006.3.2) REQUIRED PROPOSED

PLUMBING FIXTURE REQUIREMENTS : NO CHANGE TO COUNT EXISTING FIXTURES TO BE

REPLACED WITH NEW **ZONING INFORMATION**

LOT AREA: .34 ACRES, 15.000 SF (CODE, MINIMUM)

<u>setbacks</u>

FRONT : 40 FEET SIDE : 10 FEET SIDE : 10 FEET

MAXIMUM HEIGHT: 30' ABOVE 12' NAVD = 42' NAVD (2019)

MINIMUM PARKING: NO CHANGE

LOT COVERAGE: N/A

FIRM #:12021C DATED 2019

BASE FLOOD ELEVATION

(CONCESSIONS)

DESIGN FLOOD ELEVATION: (CONCESSIONS)

11' NAVD (2019) (MID & END PAVILIONS) 13' NAVD (2019)

12' NAVD (2019) (MID & END PAVILIONS) 14' NAVD(2019)

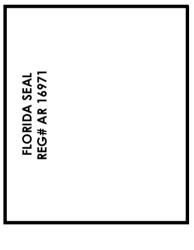
DRAWING INDEX:

DRAWING LIST		
Sheet Number	Sheet Name	
.000	COVER SHEET	
.100	PROJECT INFORMATION	
.200	BUILDING SYSTEMS & PARTITION TYPES	
5.100	ADA COMPLIANCE	
5.102	LIFE SAFETY PLAN	
5.103	LIFE SAFETY PLAN - ENLARGED PLANS	
.000	ADA RAILING PLAN OVERALL SITE PLAN/ELEVATIONS	
.001	SITE PLAN (CONCESSIONS / OPEN AIR DINING)	
.002	END-PAVILION FLOOR PLAN / ELEVATIONS	
.003	MID-PAVILION FLOOR PLAN / ELEVATIONS	
.004	PIER ACCESS DEMO PLAN	
.004A		
.004B .004C	PIER ACCESS DEMO - ELEVATIONS PIER ACCESS DEMO - ELEVATIONS	
.005	PIER ACCESS FLOOR PLAN / ELEVATIONS	
.005A	PIER ACCESS ELEVATIONS	
.005B	3D VIEWS - PIER ACCESS	
.005C	ROOF PLANS	
.006		
.007	RCP - END & MID PAVILIONS MID-PAVILION ELEVATIONS	
.008	NOT USED	
.010	NOT USED	
.011	NOT USED	
.012	END PAVILION SECTIONS	
.013	END PAVILION SECTIONS	
.014		
.015 .016	PIER ACCESS SECTIONS SEATING/DECKING SECTIONS	
.017	OVERALL FRAMING	
.018	FRAMING PLAN & DETAILS	
.019	3D VIEW - OVERALL PIER FRAMING	
.020	STAIRS DETAILS	
.021	3D VIEWS - PIER DECK ACCESS WINDOW AND DOOR SCHEDULE	
.022 .022A	DOOR DETAILS	
.022B	WINDOW DETAILS	
.023	ROOM FINISHES	
.024	ROOM FINISH DETAILS	
.025	DETAILS	
.026	DETAILS	
.027 .030	BENCH PLAN CONCESSIONS - KITCHEN FLOOR PLAN	
.036	CONCESSIONS DINING AREA DETAILS	
1	ELECTRICAL SPECIFICATIONS	
2	ELECTRICAL POWER FLOOR PLAN (CONCESSIONS/DINING	
3	ELECTRICAL LIGHTING PLAN (CONCESSIONS/DINING)	
4 5	ELECTRICAL DIAGRAMS & SCHEDULE ELECTRICAL NOTES	
1	HOOD	
2	FAN	
3	POWER WIRING CONTROLS	
\1	MECHANICAL SCHEDULES & SPECS	
2		
2	PLUMBING NOTES & SCHEDULES PLUMBING FLOOR PLAN	
2A	WATER PLAN	
3	DETAILS	
1.0	GENERAL NOTES	
2.0	END PAVILION COLUMN LAYOUT	
2.1		
2.2		
4.0 4.1	END PAVILION ROOF FRAMING PLAN MID PAVILION ROOF FRAMING PLAN	
4.1	PIER ACCESS LOW ROOF FRAMING PLAN	
4.3	PIER ACCESS HIGH ROOF FRAMING PLAN	
5.0	DETAILS	
5.1	DETAILS	

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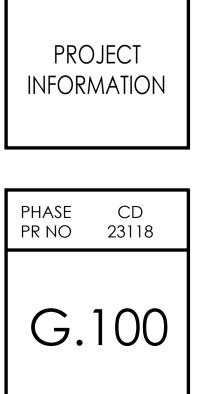
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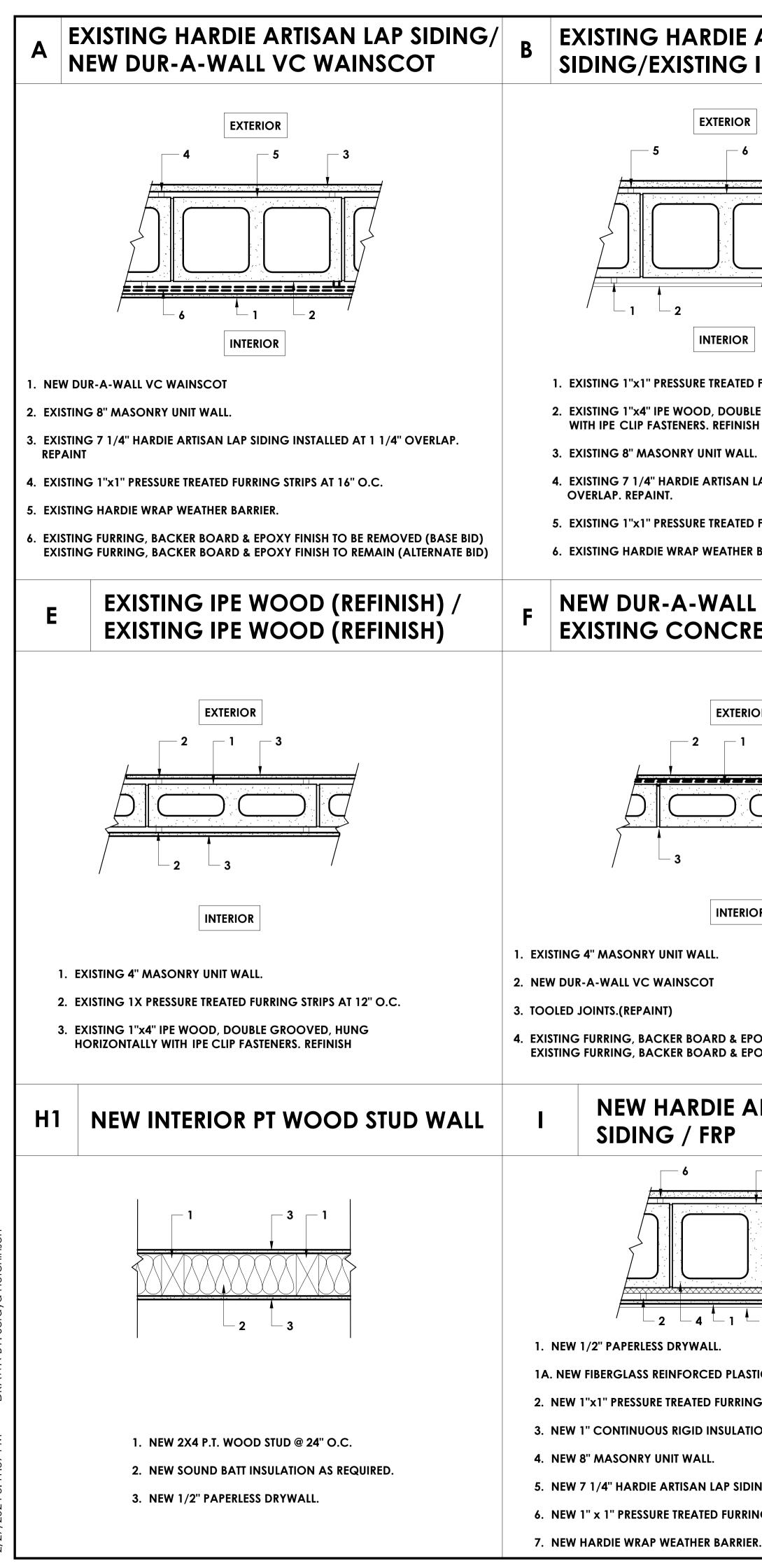
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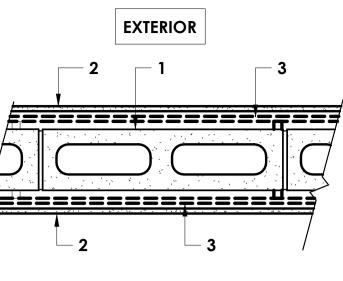


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City of Naples

ARTISAN LAP IPE WOOD (REFINISH) C EXISTING HARDIE ARTISAN LAP SIDING/ D NEW NEW IPE WOOD (REFINISH) C EXISTING HARDIE ARTISAN LAP SIDING/ D NEW NEW IPE WOOD (REFINISH) C EXISTING HARDIE ARTISAN LAP SIDING/ D NEW NEW IPE WOOD (REFINISH) C EXISTING PARAMENENDES AND ALLES AT 120 C. INTERIOR INTERIOR IPE BLOCK (REPAINT) C EXISTING IPE WOOD (REFINISH) INTERIOR INTERIOR INTERIOR IPE BLOCK (REPAINT) G EXISTING IPE WOOD (REFINISH) H NEW WAL IPE BLOCK (REPAINT) G EXISTING PARAMENENDENDER STIRES AT 120 C. INTERIOR INTERIOR IPE BLOCK (REPAINT) G EXISTING IPE WOOD (REFINISH) H NEW WAL IPE BLOCK (REPAINT) G EXISTING CONCRETE BLOCK (REPAINT) H NEW WAL IPE BLOCK (REPAINT) G EXISTING A CONCRETE BLOCK (REPAINT) H NEW WAL IPE BLOCK (REPAINT) J EXISTING A CONCRETE BLOCK (REPAINT) H NEW WAL IPE IPE BLOCK (REPAINT) J EXISTING A CONCRETE BLOCK (REPAINT) H NEW WAL IPE IPE IPE IPE IP				
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Retre BLOCK (REPAINT) G EXISTING CONCRETE BLOCK (REPAINT) I WAI Interior Interior Interior Interior Interior Interior Interior Interior Interior Interior Interior Interior Interior Interior Interior Interior Interior Interior Interior	ELE GROOVED, HUNG HORIZONTALLY SH L. LAP SIDING INSTALLED AT 1 1/4" D FURRING STRIPS AT 16" O.C.	 2. EXISTING 7 1/4" HARDIE ARTISAN LAP SIDING INSTALLED AT 1 1/4" OVERLAP. REPAINT 3. EXISTING 8" MASONRY UNIT WALL. (REPAINT) 	2. NEW D 3. EXISTIN	UR-A-WAL
Image: State Stat	-		H	
 2. EXISTING 1X PRESSURE TREATED FURRING STRIPS AT 12" O.C. 3. EXISTING 1"X4" IPE WOOD, DOUBLE GROOVED, HUNG HORIZONTALLY WITH IPE CLIP FASTENERS. REFINISH 4. TOOLED JOINTS. ARTISAN LAP J EXISTING MASONRY WALL / NEW FURRING & GYPSUM BOARD K NEW				<
J FURRING & GYPSUM BOARD K WA 7 5 1 3 STORAGES WA 1 1 3 STORAGES 1 WA 1 1 1 1 3 STORAGES 1 New 1/2 1 1 1 1 1 1 1 NEW 1/2 PAPERLESS DRYWALL 1 NEW 2" × 6' 1 NEW 1/2" PAPERLESS DRYWALL 1 NEW 1/2" PAPERLESS DRYWALL 1 NEW 2" × 6' 1 NEW 2" × 6' 1		 2. EXISTING 1X PRESSURE TREATED FURRING STRIPS AT 12" O.C. 3. EXISTING 1"x4" IPE WOOD, DOUBLE GROOVED, HUNG HORIZONTALLY WITH IPE CLIP FASTENERS. REFINISH 		1
 1. NEW 1/2" PAPERLESS DRYWALL. 2. NEW 1"x1" PRESSURE TREATED FURRING STRIPS AT 12" O.C. 3. NEW 1"x1" PRESSURE TREATED FURRING STRIPS AT 12" O.C. 3. NEW 1"CONTINUOUS RIGID INSULATION PER ENERGY CALCULATIONS 4. EXISTING 8" MASONRY UNIT WALL (REMOVE EXISTING EXTERIOR LAP SIDING AND FURRING). 5. EXISTING FURRING, BACKER BOARD & EPOXY FINISH TO BE REMOVED (BASE BID) EXISTING FURRING, BACKER BOARD & EPOXY FINISH TO REMAIN (ALTERNATE BID) 1. NEW 2" x 6" 1. NEW 2" x 6" 	ARTISAN LAP		K	
ER. ER. EXISTING 1"x4" IPE WOOD, DOUBLE GROOVED, HUNG HORIZONTALLY WITH IPE CLIP FASTENERS. REFINISH (ABOVE)	STIC PANELS. NG STRIPS AT 12" O.C. FION PER ENERGY CALCULATIONS. DING INSTALLED AT 1 1/4" OVERLAP.	 1. NEW 1/2" PAPERLESS DRYWALL. 2. NEW 1''X1" PRESSURE TREATED FURRING STRIPS AT 12" O.C. 3. NEW 1" CONTINUOUS RIGID INSULATION PER ENERGY CALCULATIONS 4. EXISTING 8" MASONRY UNIT WALL (REMOVE EXISTING EXTERIOR LAP SIDING AND FURRING). 5. EXISTING FURRING, BACKER BOARD & EPOXY FINISH TO BE REMOVED (BASE BID) EXISTING FURRING, BACKER BOARD & EPOXY FINISH TO REMAIN (ALTERNATE BID) 	2. 1	NEW 7/16"
74-1111 Nanles Pier Reconstruction - ITR		EXISTING 1"x4" IPE WOOD, DOUBLE GROOVED, HUNG HORIZONTALLY WITH IPE CLIP		

W DUR-A-WALL VC WAINSCOT / W DUR-A-WALL VC WAINSCOT



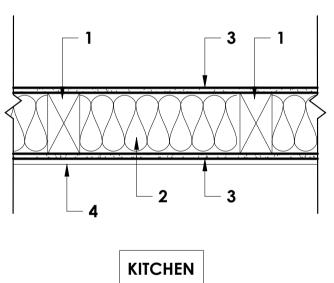
INTERIOR

ASONRY UNIT WALL

ALL VC WAINSCOT

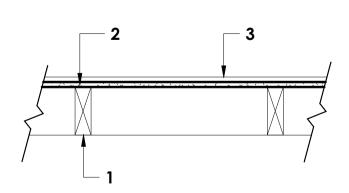
ING, BACKER BOARD & EPOXY FINISH TO BE REMOVED (BASE BID) ING, BACKER BOARD & EPOXY FINISH TO REMAIN (ALTERNATE BID)

W INTERIOR PT WOOD STUD ALL / FRP



- 1. NEW 2X4 P.T. WOOD STUD @ 24" O.C.
- 2. NEW SOUND BATT INSULATION AS REQUIRED.
- 3. NEW 1/2" PAPERLESS DRYWALL.
- 4. NEW FIBERGLASS REINFORCED PLASTIC PANELS

EW PT EXTERIOR WOOD STUD ALL/NEW HARDIE ART. LAP SIDING

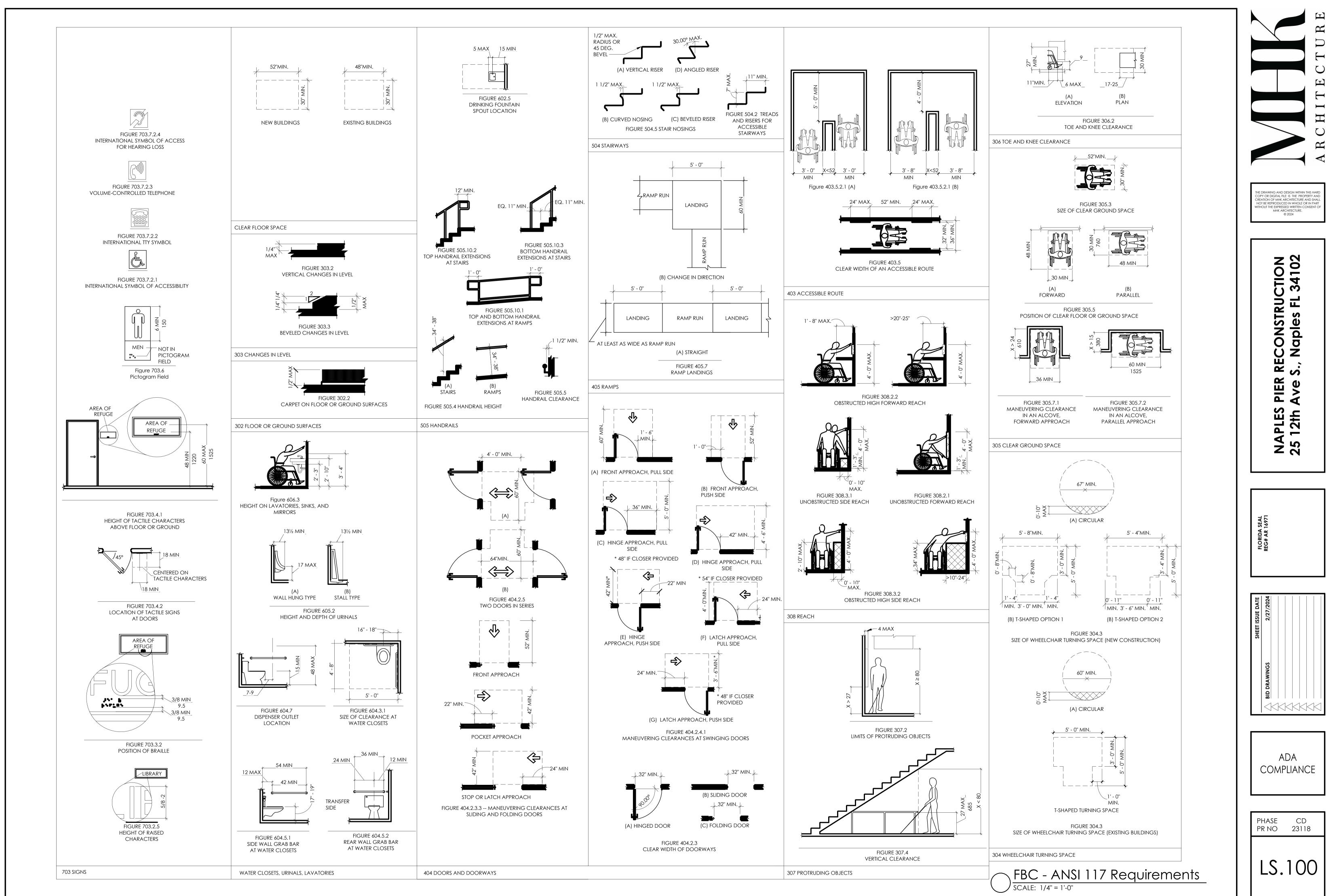


6" PT WOOD STUDS @ 24" O.C.

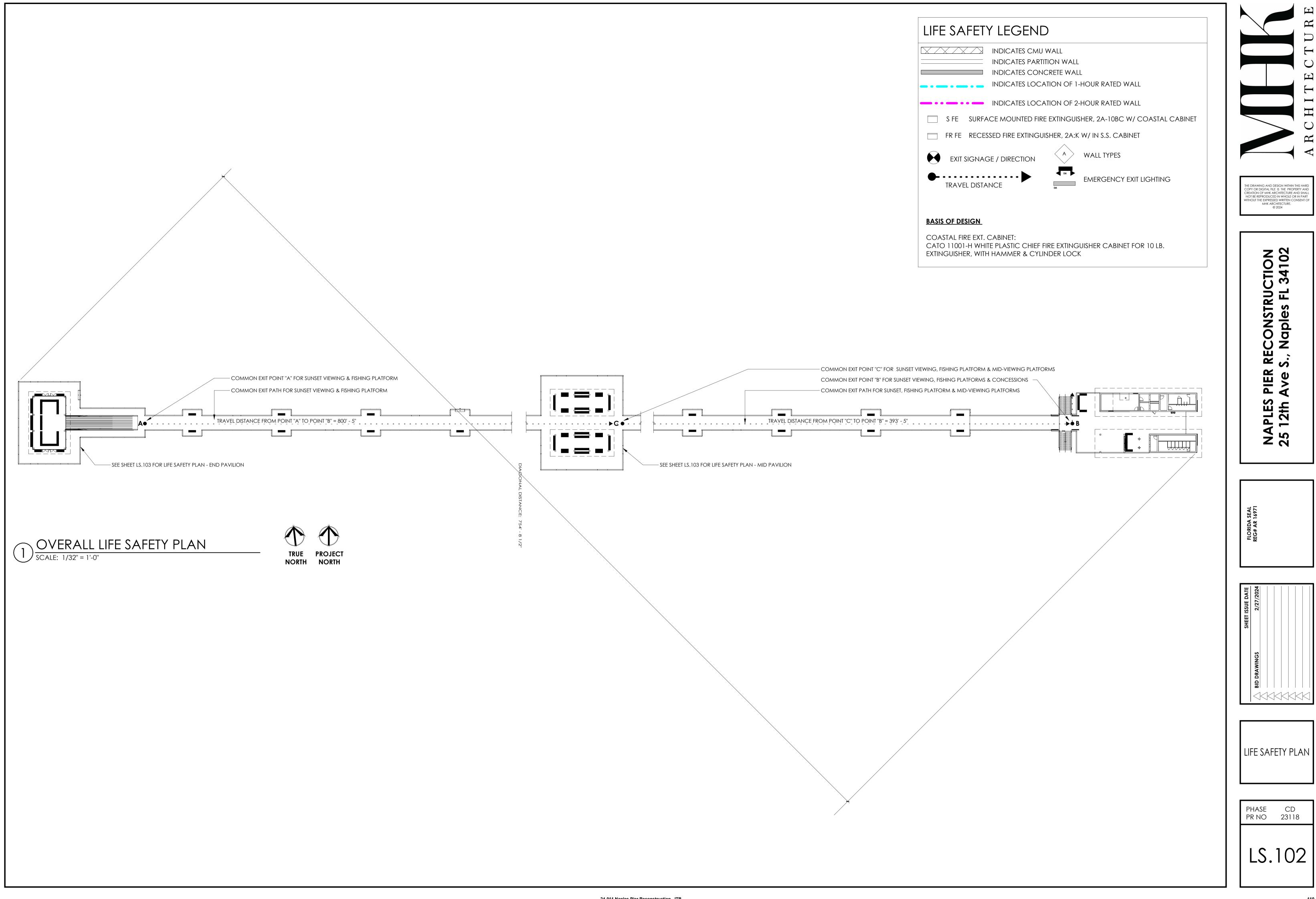
6" ADVANTECH ZIP BOARD

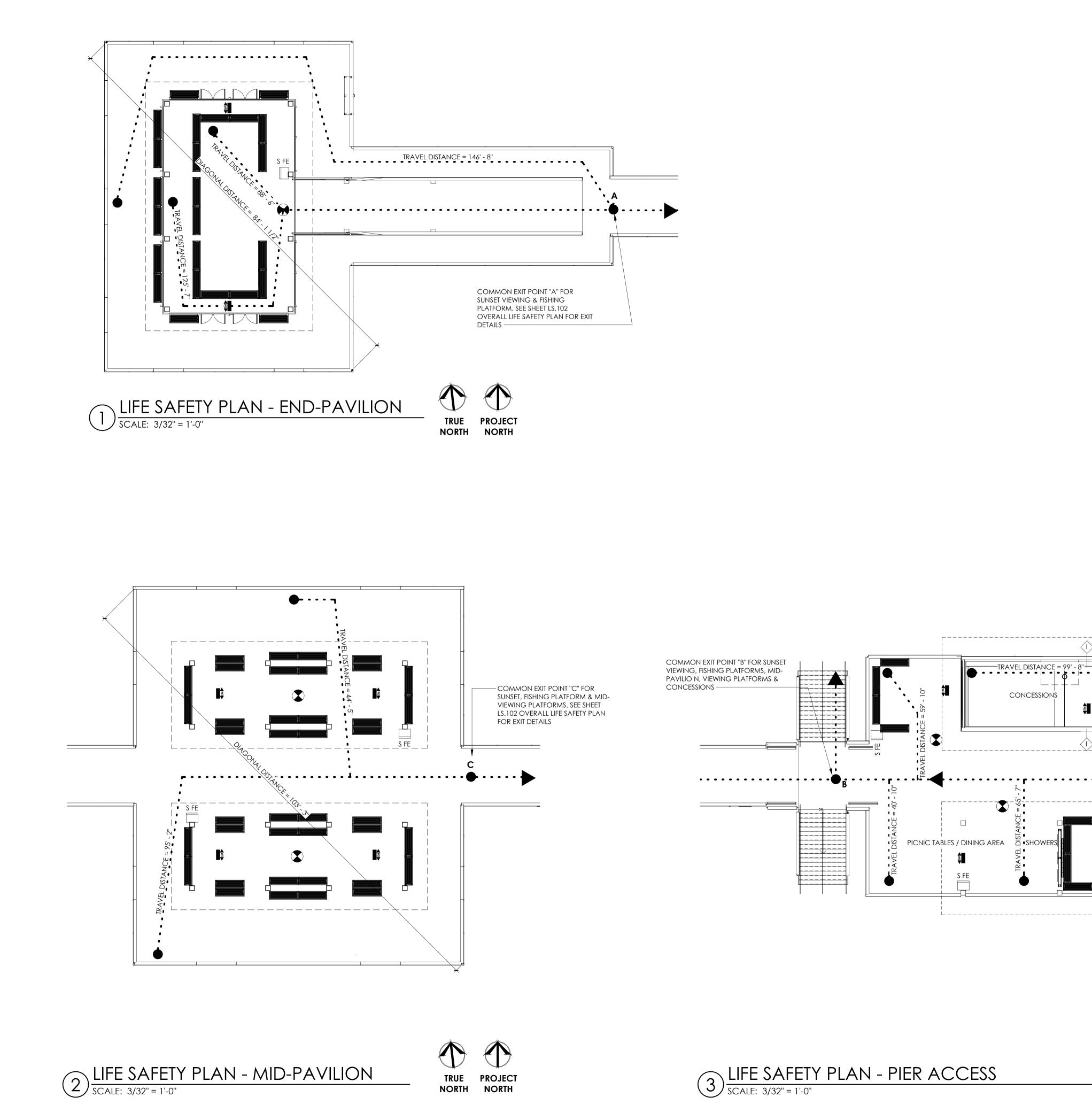
4" HARDIE ARTISAN LAP SIDING INSTALLED @ 1 1/4" OVERLAP

ARCHITECTURE
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NAPLES PIER RECONSTRUCTION 25 12th Ave S., Naples FL 34102
FLORIDA SEAL REG# AR 16971
BID DRAWINGS 2/27/2024 Image: state st
BUILDING SYSTEMS & PARTITION TYPES
PHASE CD 23118 G.200



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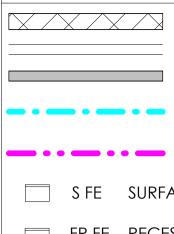


CONCESSIONS PIER EXIT TO PARKING PICNIC TABLES / DINING AREA ⊡ ●SHOW



 $\langle 1 \rangle$

LIFE SAFETY LEGEND



INDICATES PARTITION WALL INDICATES CONCRETE WALL • ____ • ___ • ___ INDICATES LOCATION OF 1-HOUR RATED WALL

INDICATES LOCATION OF 2-HOUR RATED WALL

S FE SURFACE MOUNTED FIRE EXTINGUISHER, 2A-10BC W/ COASTAL CABINET

FR FE RECESSED FIRE EXTINGUISHER, 2A:K W/ IN S.S. CABINET

EXIT SIGNAGE / DIRECTION



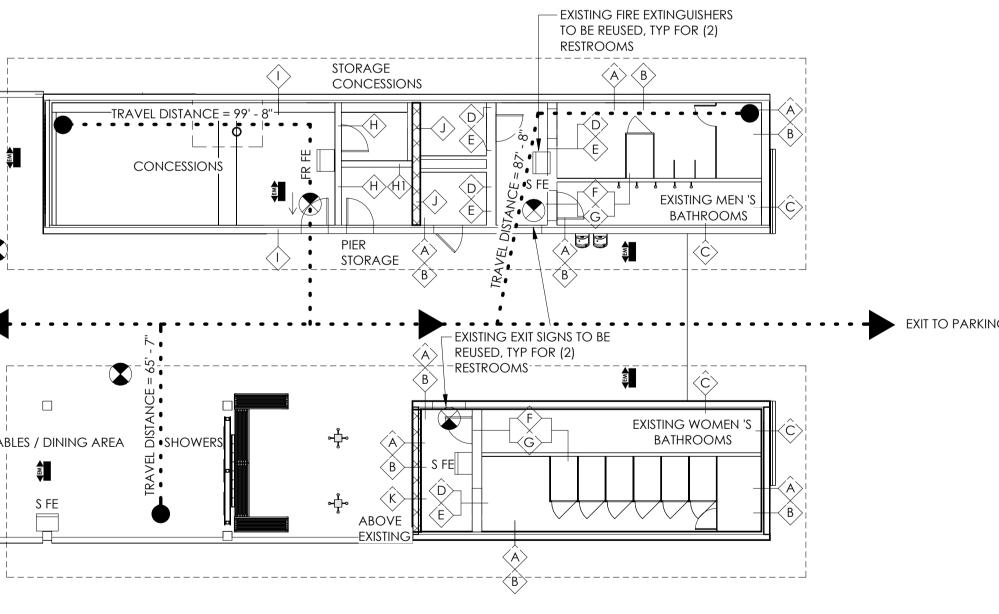


WALL TYPES

EMERGENCY EXIT LIGHTING

BASIS OF DESIGN

COASTAL FIRE EXT. CABINET: CATO 11001-H WHITE PLASTIC CHIEF FIRE EXTINGUISHER CABINET FOR 10 LB. EXTINGUISHER, WITH HAMMER & CYLINDER LOCK



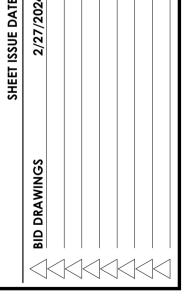
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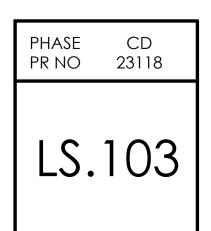


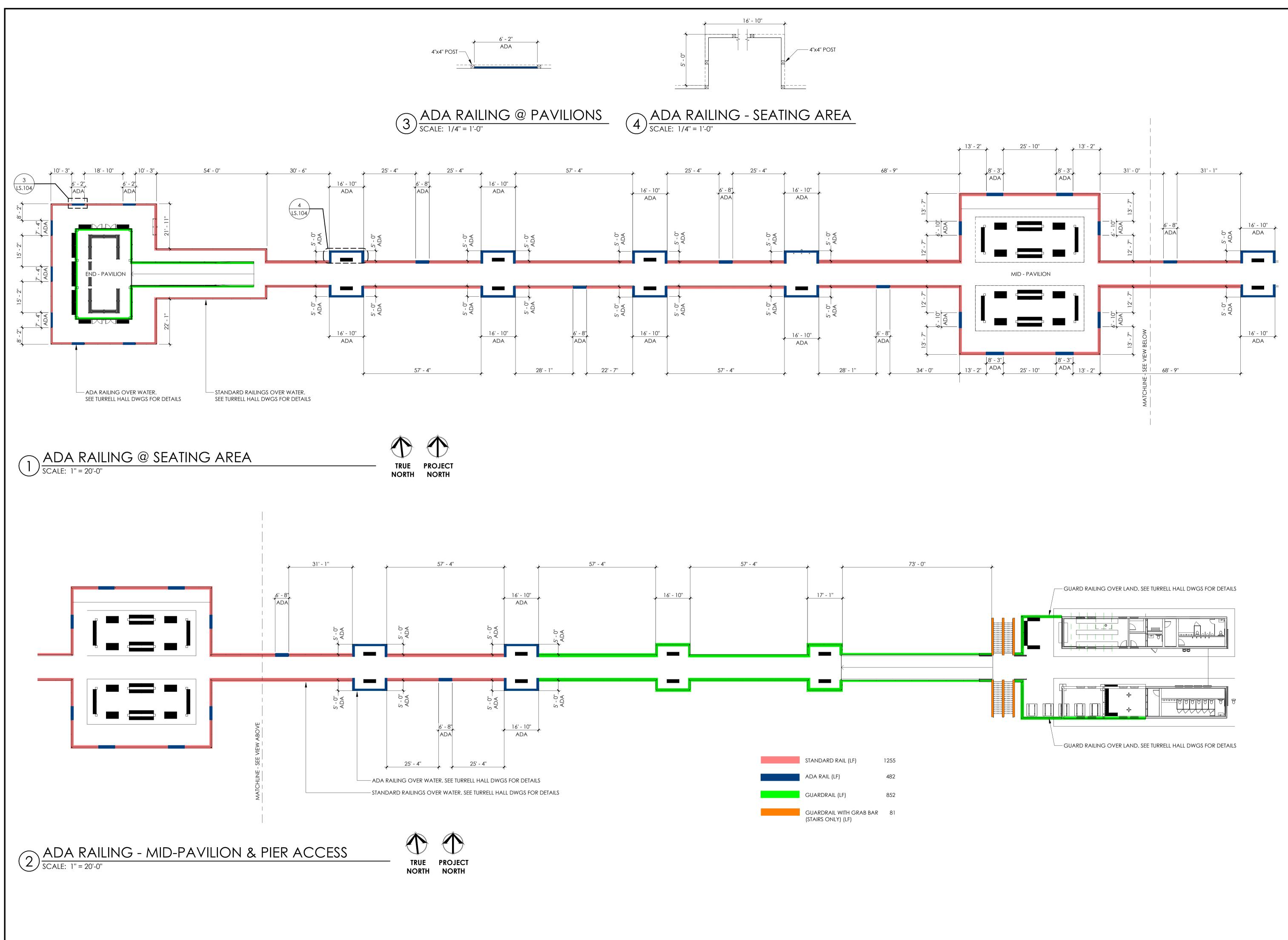
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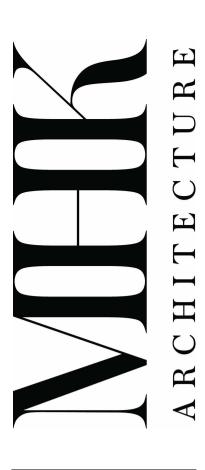






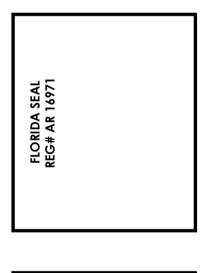


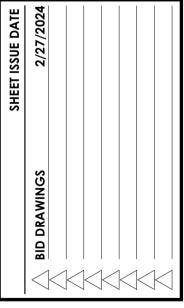




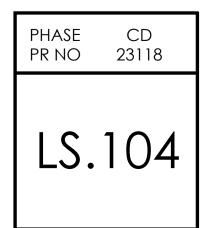


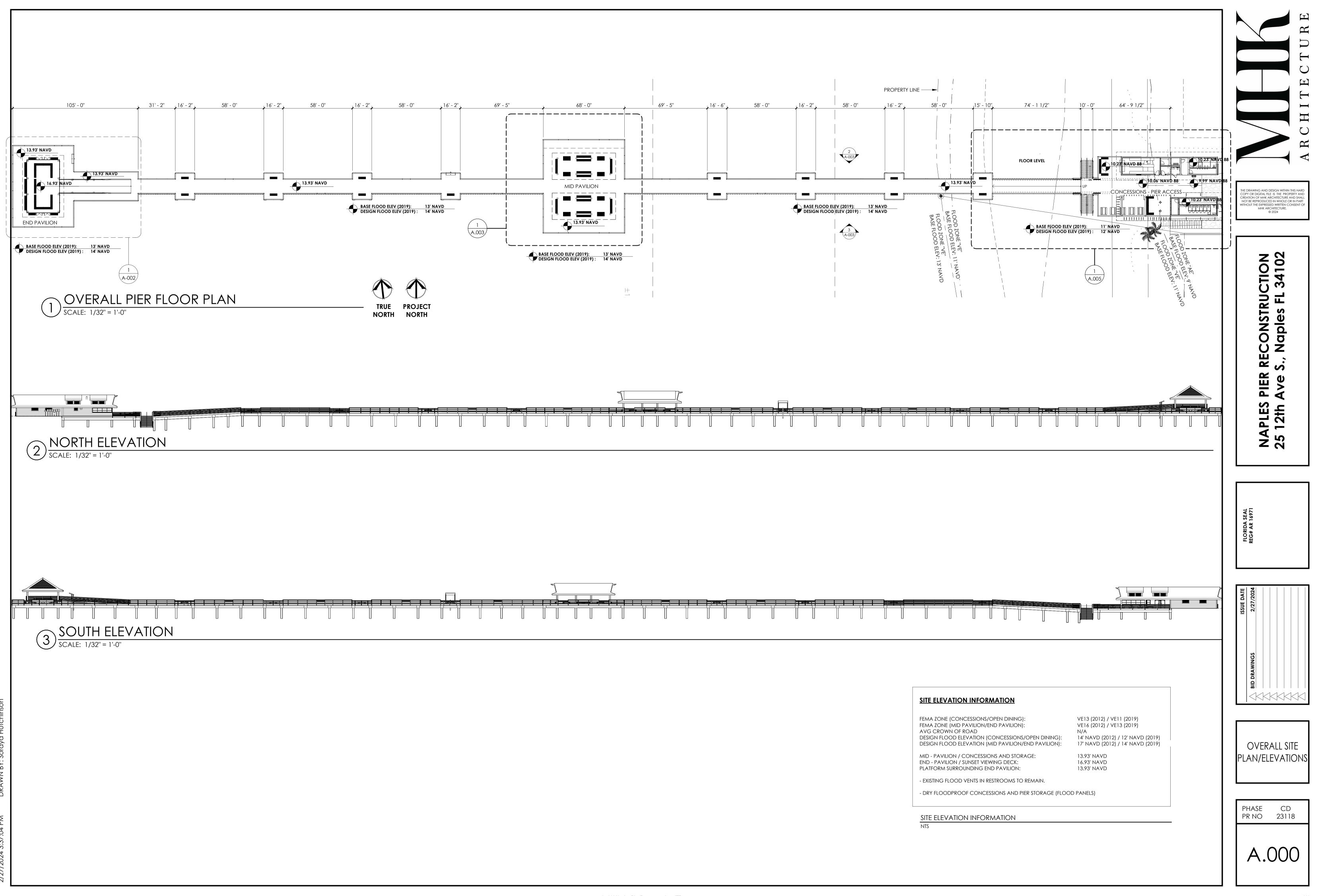


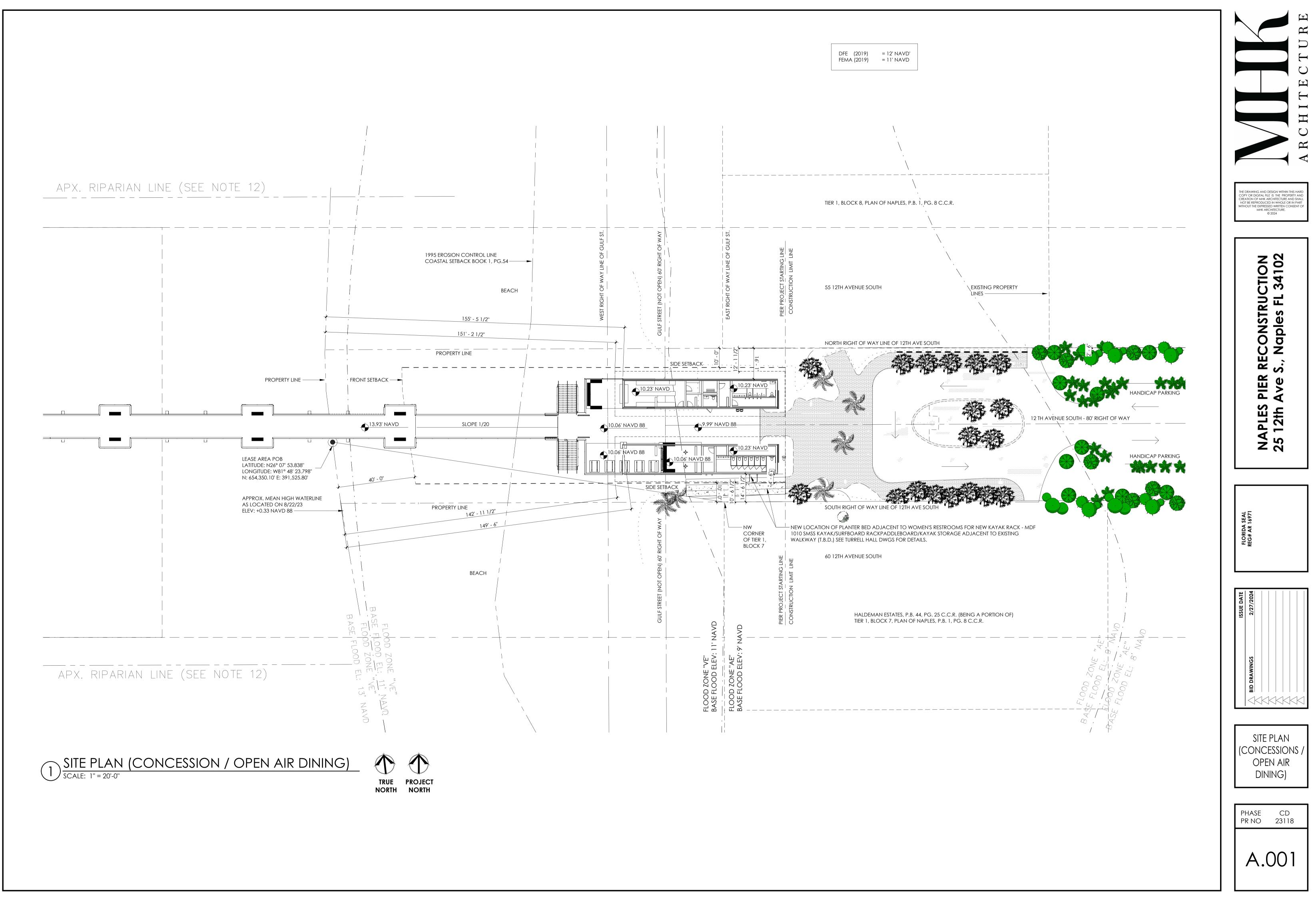




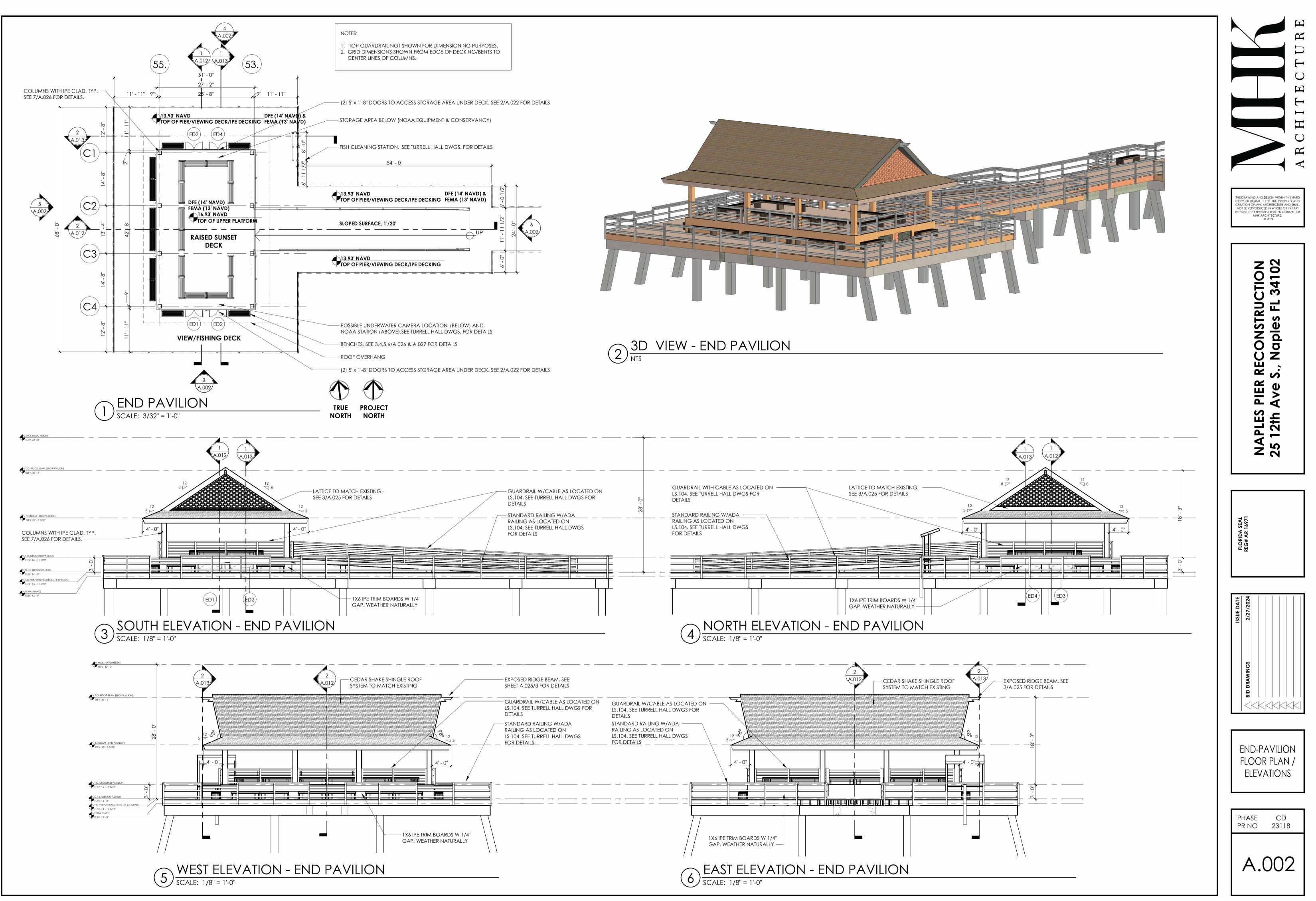


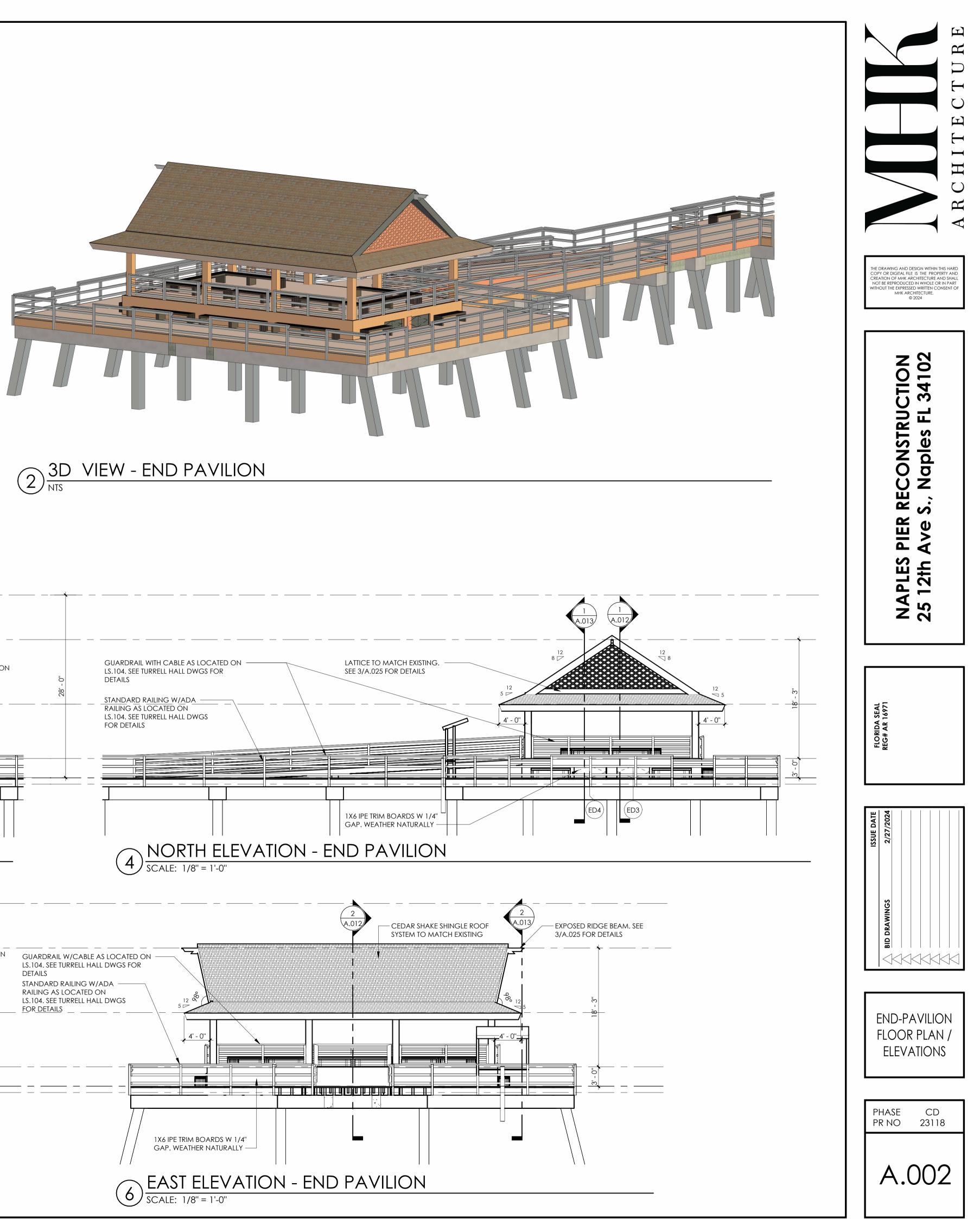


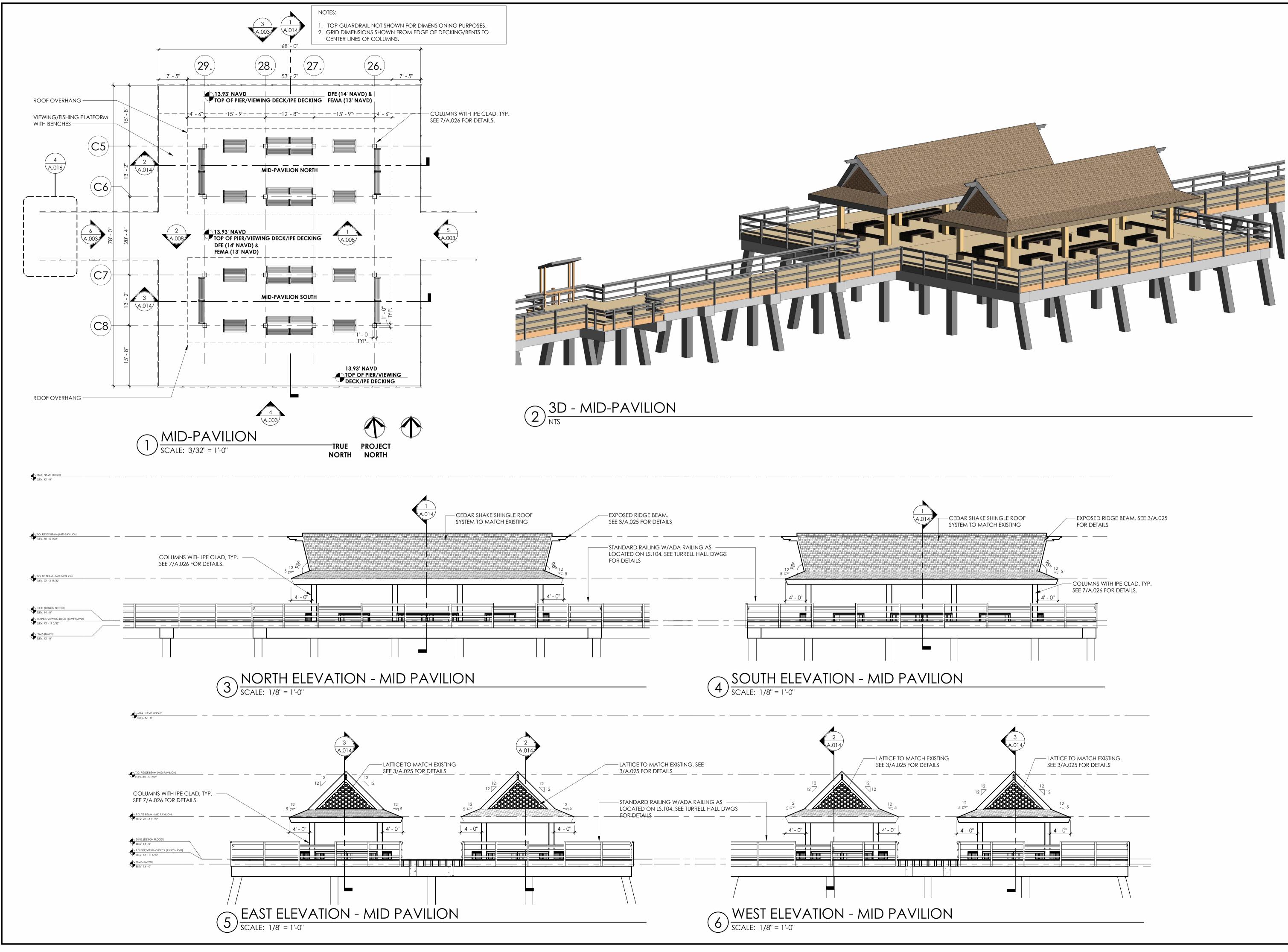




24-011 Naples Pier Reconstruction - ITB









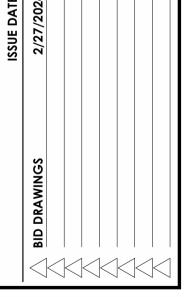




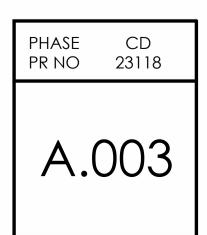


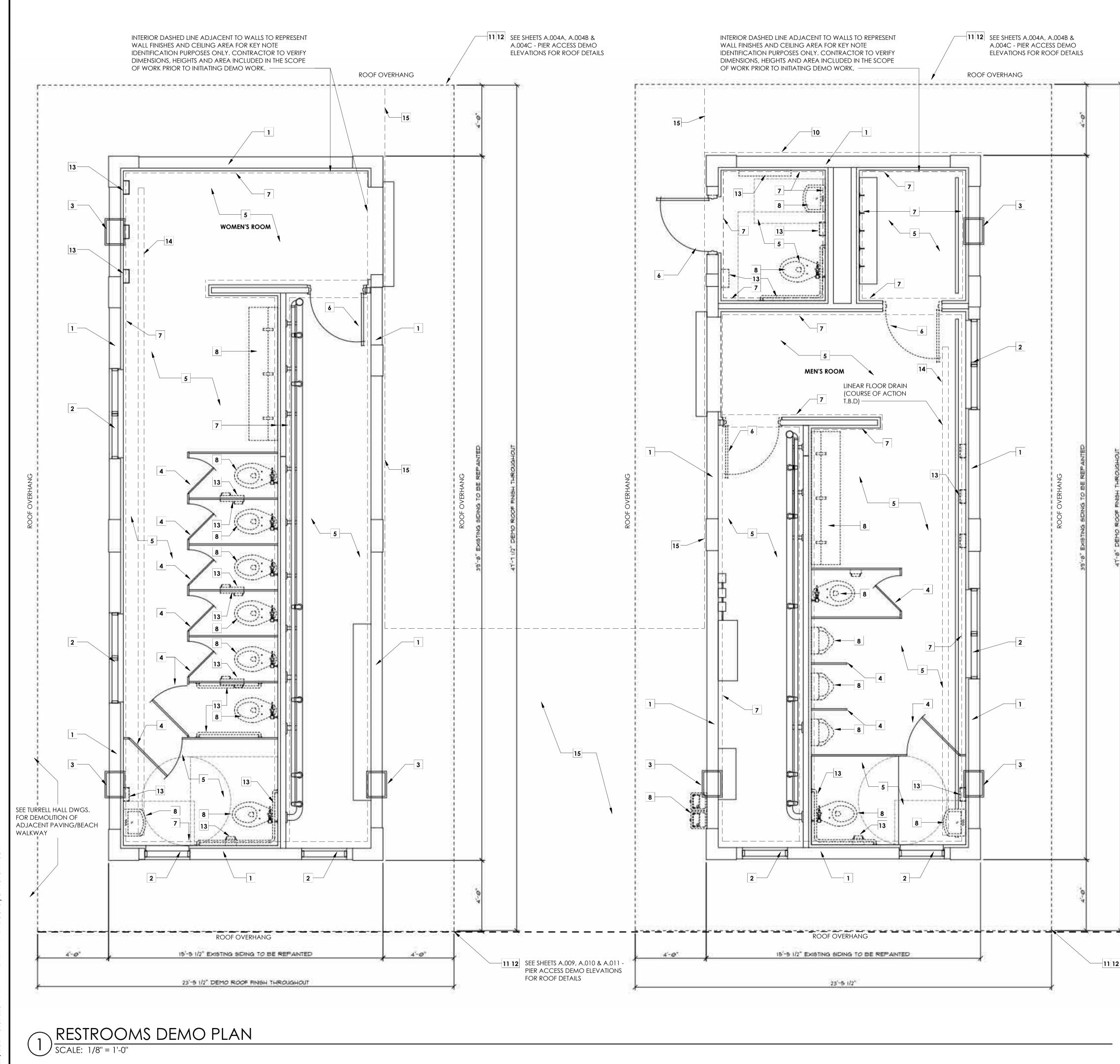
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City of Naples

DEMOLITION PLAN NOTES

1. EXISTING WALL STRUCTURE TO REMAIN.

2. EXISTING WINDOWS AND LOUVERED VENTS TO REMAIN (U.O.N). VERIFY VENTS FOR FUNCIONALITY AND OVERALL CONDITION

3. EXISTING FLOOD VENTS TO REMAIN.

4. EXISTING TOILET PARTITIONS TO REMAIN.

5. REMOVE FLOOR FINISHES COMPLETE. (BASE BID). EXISTING FLOOR FINISHES TO REMAIN (ALTERNATE BID) 6. REMOVE DOOR AND FRAME COMPLETE.

0. REMOVE DOOR AND TRAME COMPLETE.

7. REMOVE INTERIOR WALL FINISHES AND ASSOCIATED BACKING BELOW IPE WAINSCOT COMPLETE. (BASE BID). EXISTING WALL FINISH/BACKING BELOW IPE TO REMAIN (ALTERNATE BID)

8. REMOVE PLUMBING FIXTURES COMPLETE.

9. NOT USED.

10. REMOVE EXISTING EXTERIOR FINISH AND ASSOCIATED BACKING COMPLETE.

11. REMOVE EXISTING ROOF SHINGLES COMPLETE.

12. REMOVE ANY ROOFING UNDERLAYMENT, BLOCKING OR INSULATION WITH SIGNS OF DECAY OR DAMAGE, COVER EXPOSED SURFACE TO PROTECT ROOF STRUCTURE AND INTERIOR OF BUILDING FROM POTENTIAL DAMAGE DUE TO WEATHER EXPOSURE OR UNATHORIZED ACCESS.

13. REMOVE BATHROOM ACCESORIES COMPLETE.

14. EXISTING LINEAR FLOOR DRAIN TO BE REMOVED AND REPLACED.

15. REMOVE EXISTING WOOD DECKING AND PAVING BETWEEN RESTROOM BUILDINGS.

GENERAL DEMOLITION NOTES

1. FOR THE DEMOLITION OF THE EXISTING PIER STRUCTURE, EXISTING PIER BUILDINGS AND STRUCTURES, INCLUDING BEACH STAIRS AND DECKING, SEE MARINE ENGINEER DRAWINGS.

2. THESE DRAWINGS ARE DIAGRAMMATIC AND SHALL NOT BE SCALED. FIELD VERIFY ALL DIMENSIONS, EXISTING CONDITIONS, AND LOCATIONS PRIOR TO STARTING WORK. REPORT ANY DISCREPANCIES TO ARCHITECT. DEMOLITION DRAWINGS TO BE CROSSED CHECKED WITH PROPOSED DESIGN INTENT.

3. ALL WORK OUTLINED SHALL STRICTLY CONFORM TO ALL APPLICABLE CODES AND ORDINANCES, IN THE EVENT OF A CONFLICT THE MOST STRINGENT REQUIREMENTS SHALL GOVERN AND BE MET.

4. DEMOLITION PLANS ARE INTENDED TO INDICATE GENERAL DEMOLITION REQUIREMENTS. PROVIDE ADDITIONAL DEMOLITION AS REQUIRED BY NEW CONSTRUCTION WHETHER SHOWN OR NOT WTH WRITTEN PERMISSION OF ARCHITECT.

5. REMOVE EXISTING CONSTRUCTION/BUILDING ELEMENTS INDICATED WITH "DASHED" OR 'BROKEN" LINES UNLESS NOTED OTHERWISE.

6. PROTECT ADJACENT SPACES AND PROPERTIES FROM DAMAGE THROUGHOUT CONSTRUCTION.

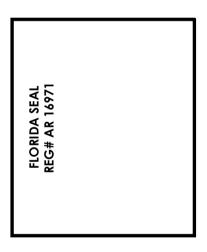
7. WHERE REMOVAL OF ITEMS LEAVES HOLES AND/OR DAMAGED SURFACES THAT WILL EXPOSED IN FINISHED WORK, PATCH AND REPAIR AS INDICATED ON CONSTRUCTION DOCUMENTS.

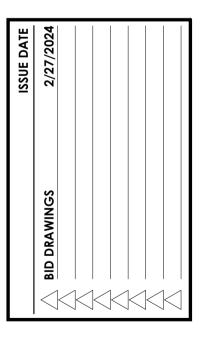
8. REFERENCE MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR REMOVAL/RELOCATION OF ITEMS PERTAINING THESE AREAS OF WORK.

9. EXISTING DRAINS, WATER LINES, AND ELECTRICAL STUBOUTS ARE TO BE CAPPED, IF NOR REUSED.10. PROVIDE REQUIRED SHORING TO MAINTAIN STRUCTURAL INTEGRITY OF EXISTING BUILDINGS TO REMAIN.



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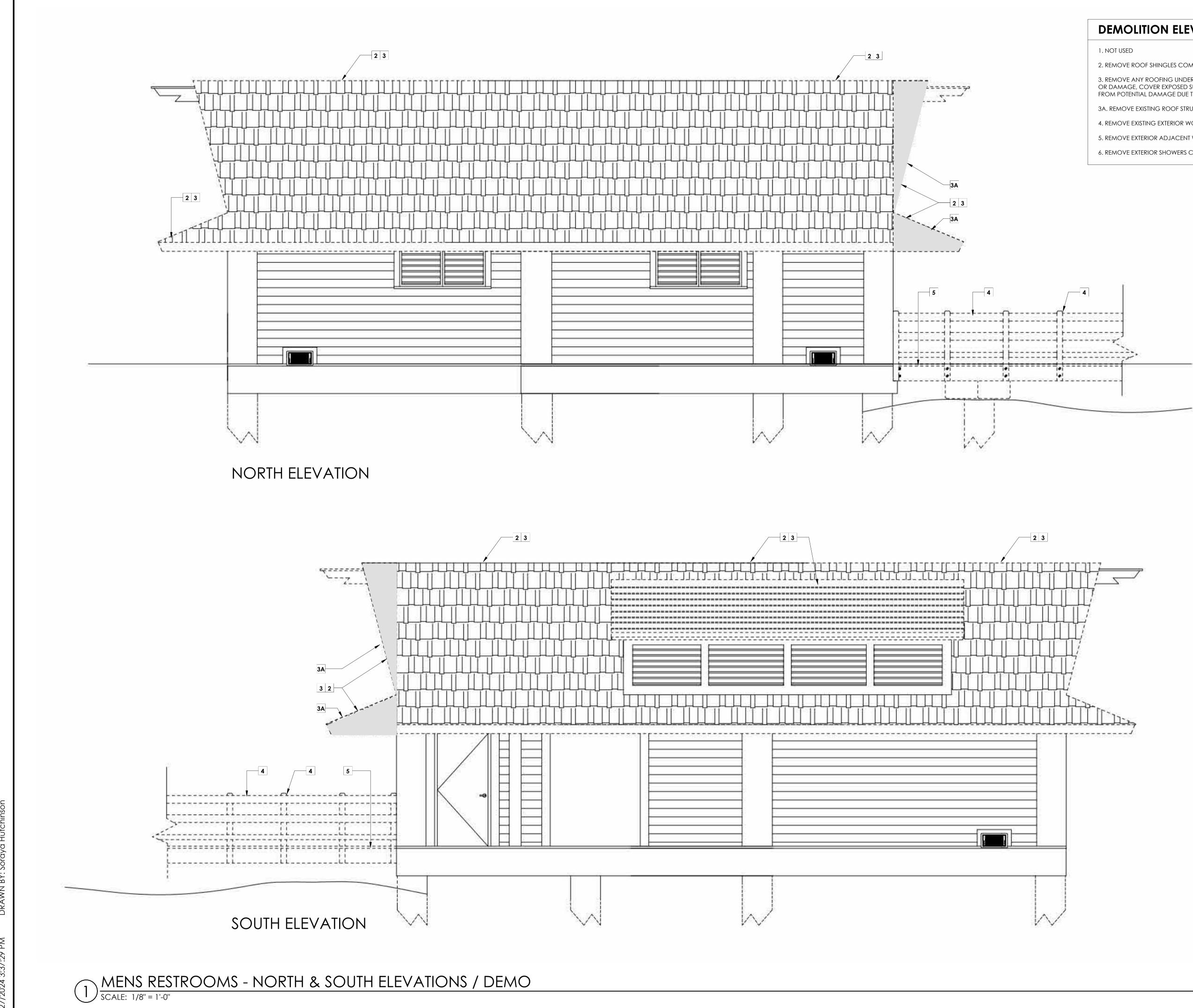




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EAST LIMIT OF DEMOLITION (DECKING/PAVING) THIS PROJECT

11 12 SEE SHEETS A.009, A.010 & A.011 -PIER ACCESS DEMO ELEVATIONS FOR ROOF DETAILS



DEMOLITION ELEVATION NOTES

2. REMOVE ROOF SHINGLES COMPLETE.

3. REMOVE ANY ROOFING UNDERLAYMENT, BLOCKING OR INSULATION WITH SIGNS OF DECAY OR DAMAGE, COVER EXPOSED SURFACE TO PROTECT ROOF STRUCTURE AND INTERIOR OF BUILDING FROM POTENTIAL DAMAGE DUE TO WEATHER EXPOSURE OR UNAUTHORIZED ACCESS.

3A. REMOVE EXISTING ROOF STRUCTURE THAT IS NOT REQUIRED WHEN NEW ROOF STRUCTURE IS BUILT.

- 4. REMOVE EXISTING EXTERIOR WOODEN POST AND RAILING COMPLETE.
- 5. REMOVE EXTERIOR ADJACENT WOOD DECK.

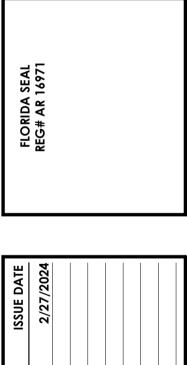
6. REMOVE EXTERIOR SHOWERS COMPLETE / EXISTING SHOWERS TO BE REINSTALLED OVER NEW DECKING.

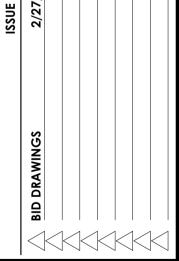




CTION 34102

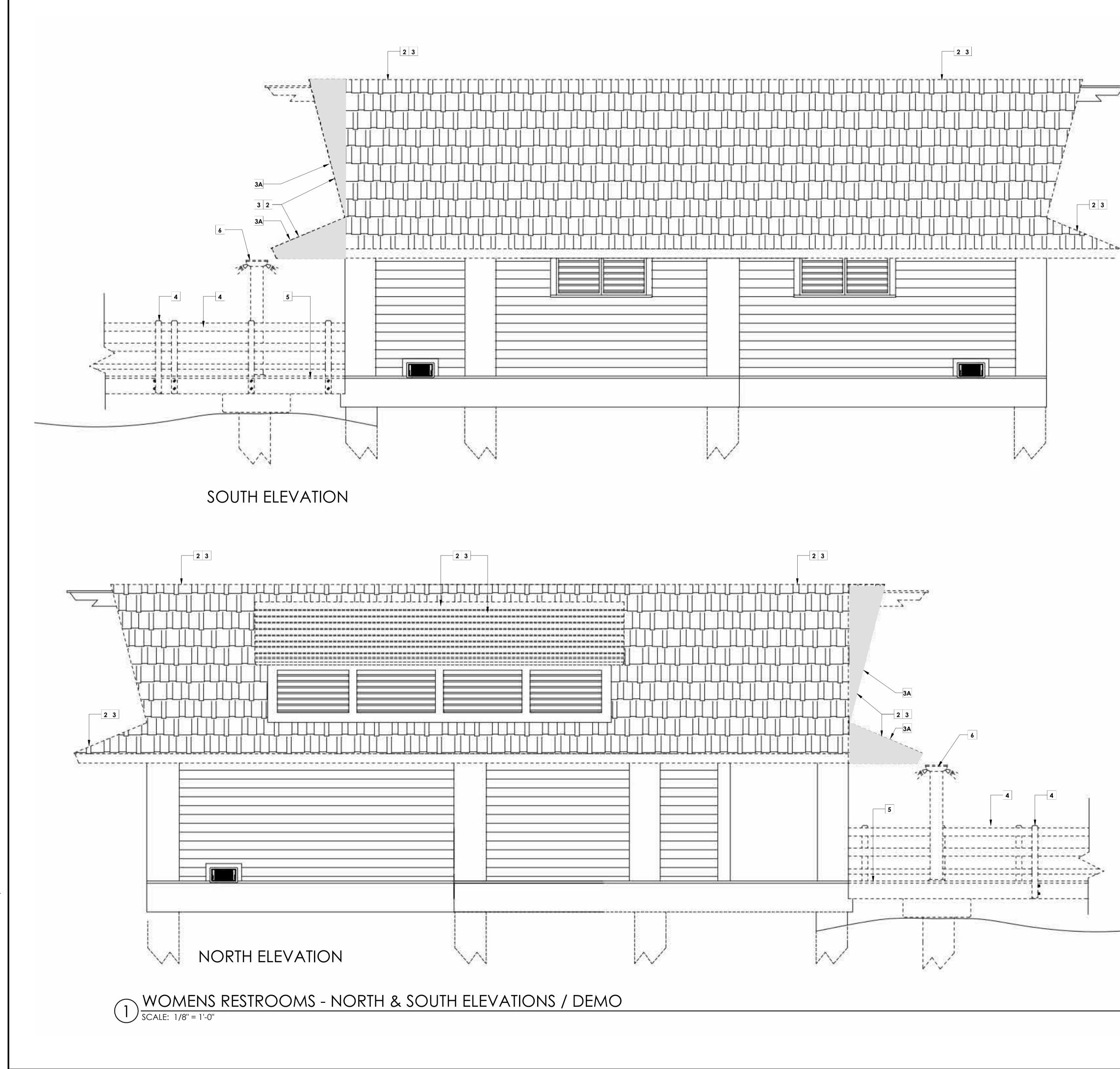
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DEMOLITION ELEVATION NOTES

1. NOT USED

2. REMOVE ROOF SHINGLES COMPLETE.

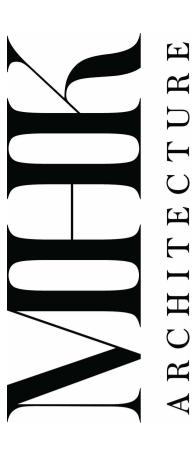
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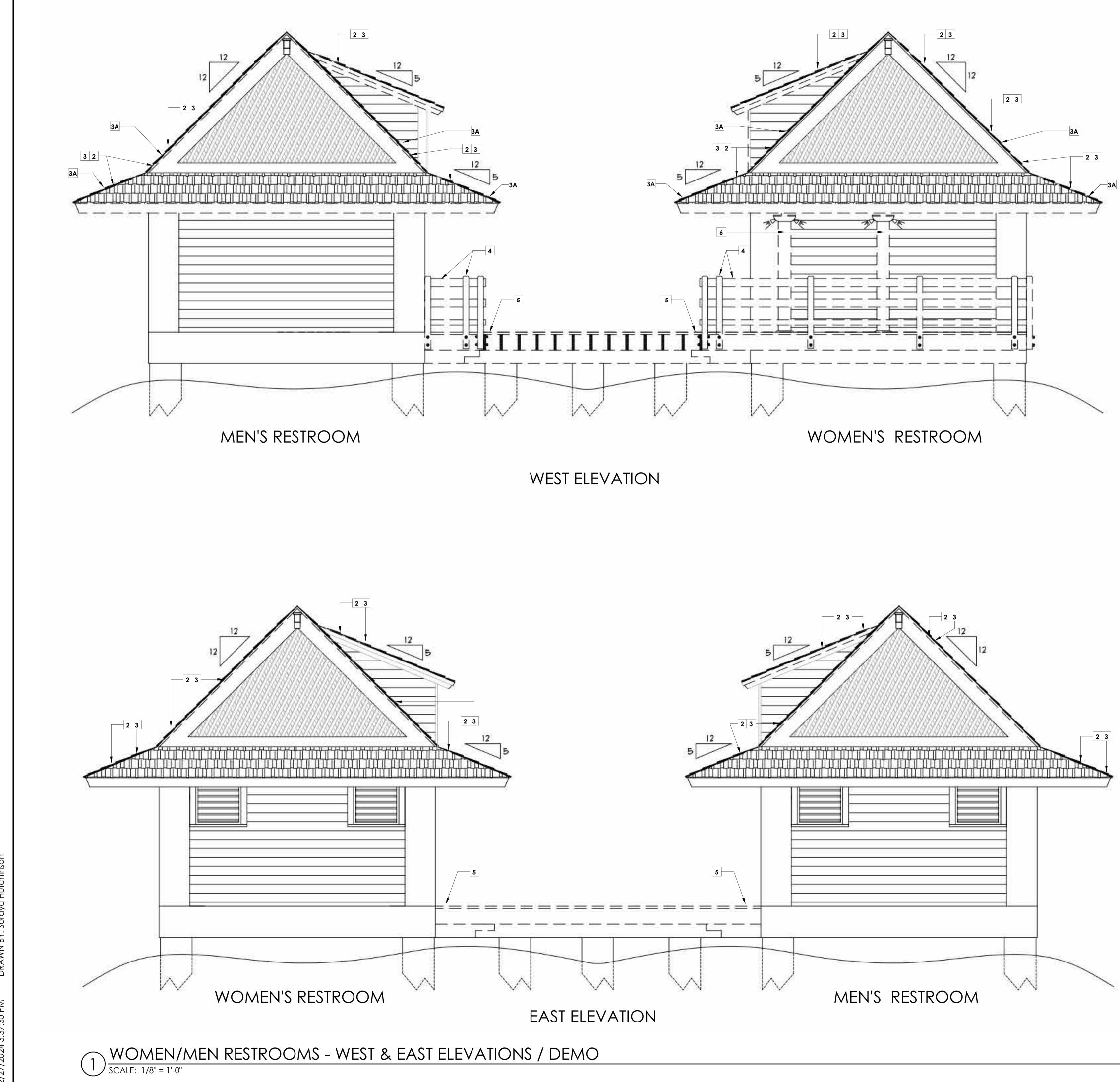


CTION 34102 CONSTRUC Naples FL LL. S., PIER Ave NAPLES 25 12th /

FLORIDA SEAL Reg# Ar 16971



PHASE	CD
PR NO	23118
A.C	04B



City of Naples

DEMOLITION ELEVATION NOTES

1. NOT USED

2. REMOVE ROOF SHINGLES COMPLETE.

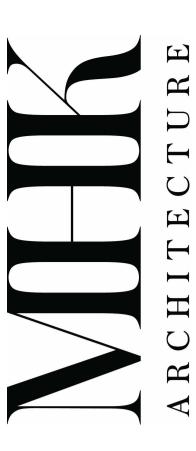
3. REMOVE ANY ROOFING UNDERLAYMENT, BLOCKING OR INSULATION WITH SIGNS OF DECAY OR DAMAGE, COVER EXPOSED SURFACE TO PROTECT ROOF STRUCTURE AND INTERIOR OF BUILDING FROM POTENTIAL DAMAGE DUE TO WEATHER EXPOSURE OR UNAUTHORIZED ACCESS.

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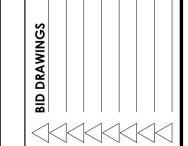
6. REMOVE EXTERIOR SHOWERS COMPLETE / EXISTING SHOWERS TO BE REINSTALLED OVER NEW DECKING.





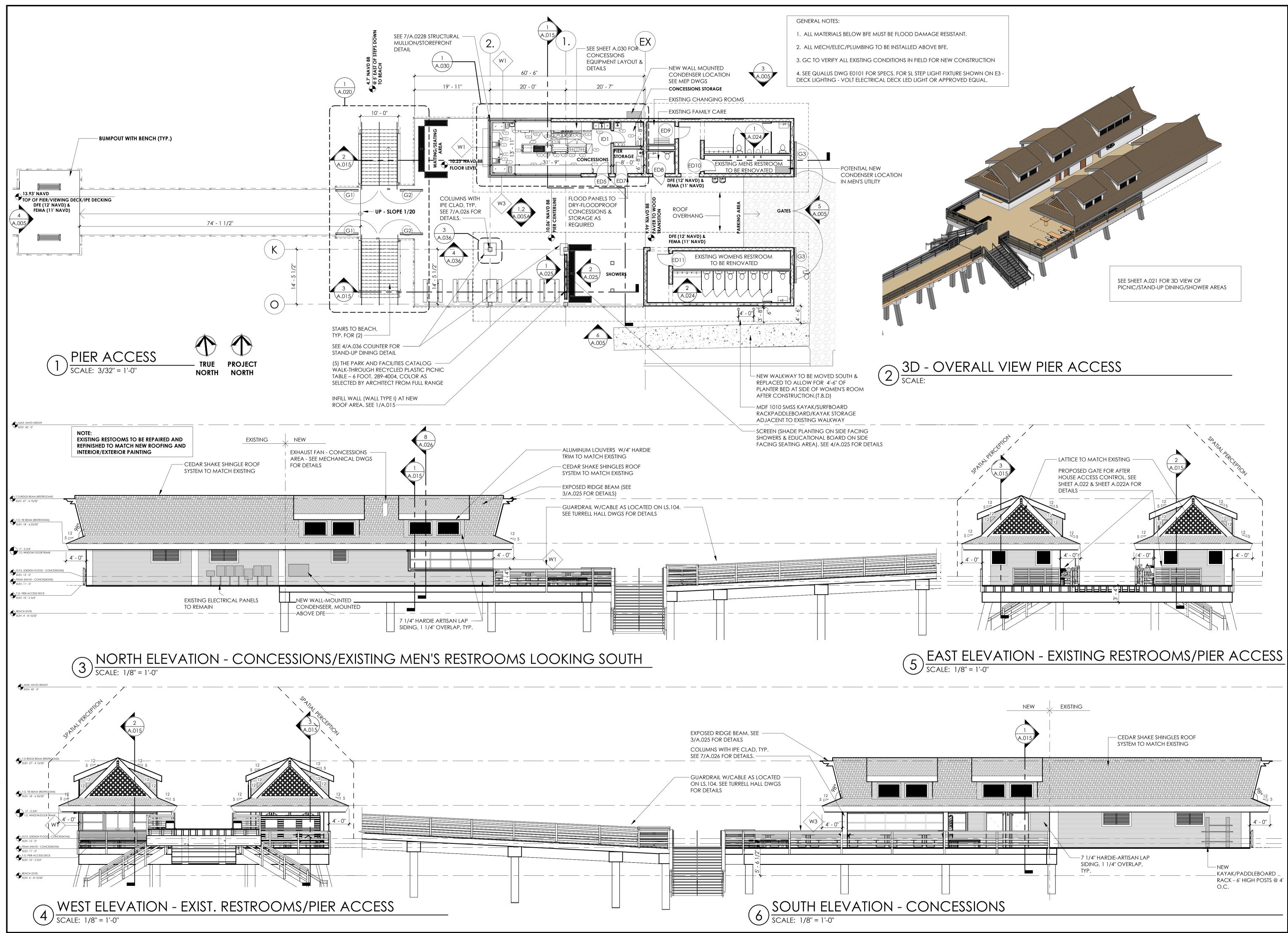
CTION 34102 CONSTRUC RE(S., | PIER Ave NAPLES 25 12th /

FLORIDA SEAL REG# AR 16971



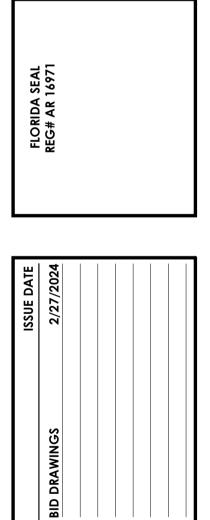


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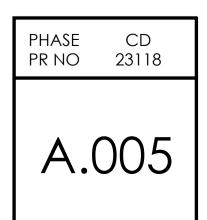


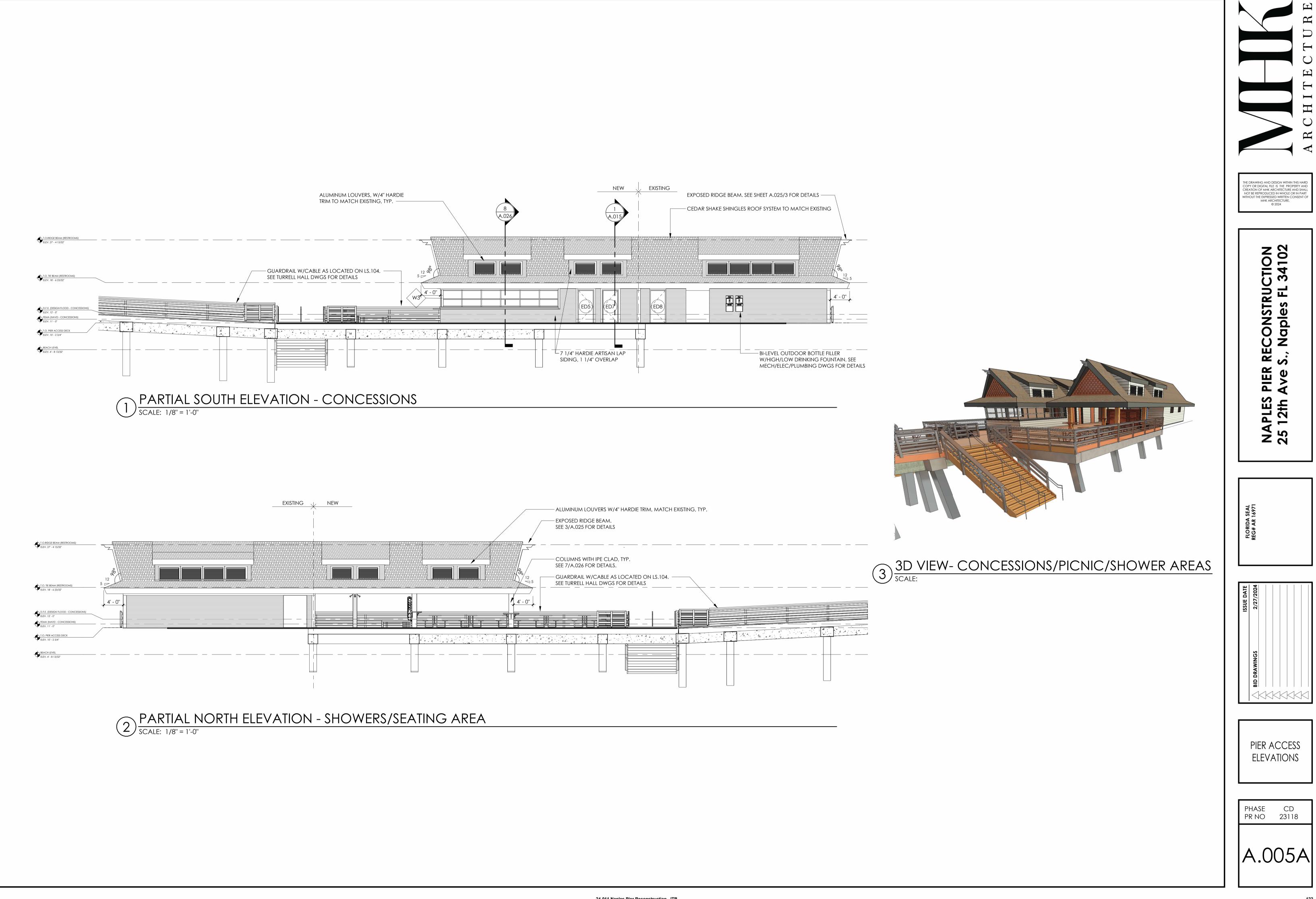
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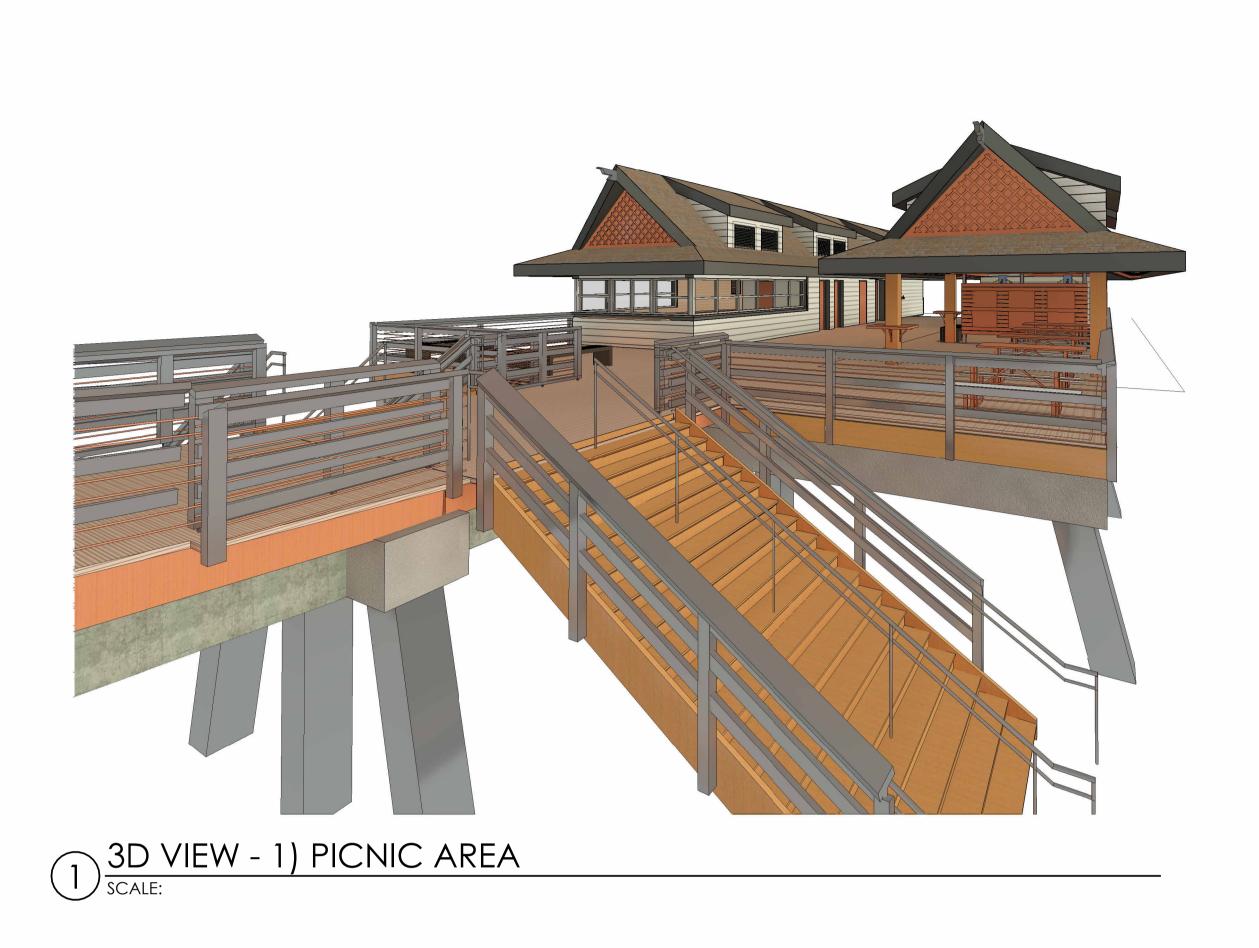


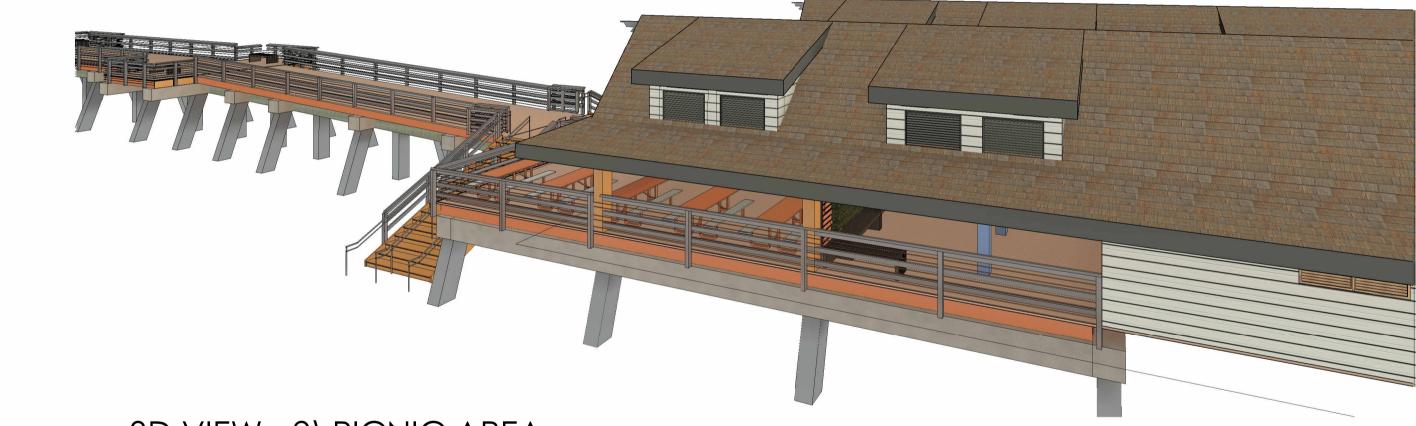
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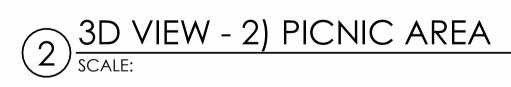




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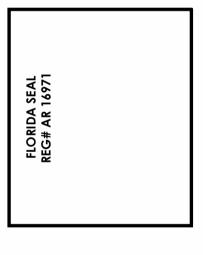


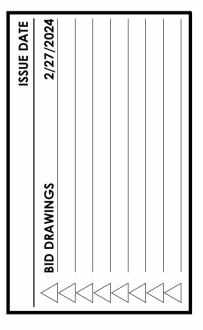
3 3D VIEW - 3) PICNIC AREA

ARCHITECTURE

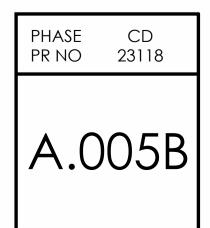


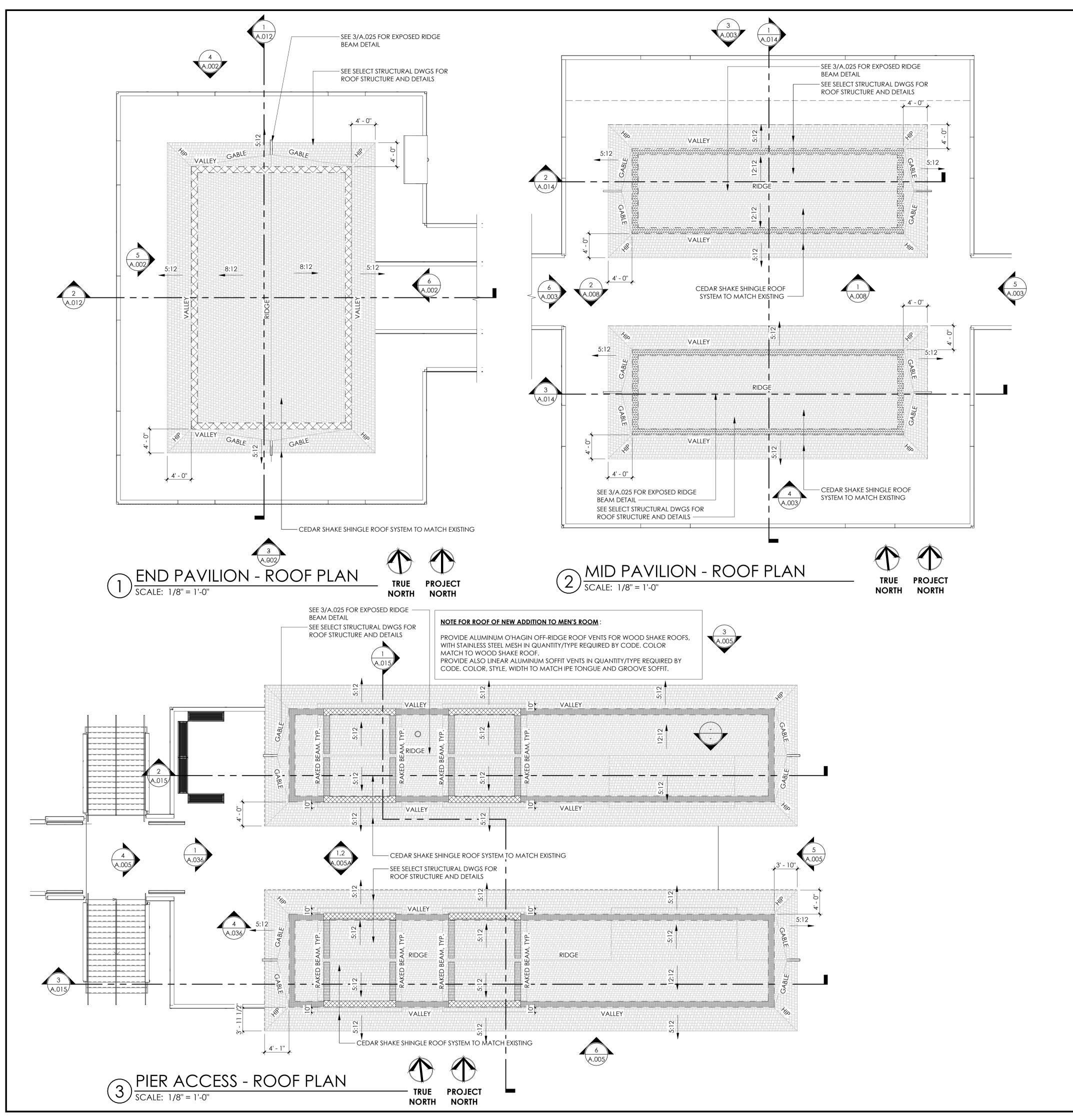






3D VIEWS - PIER ACCESS





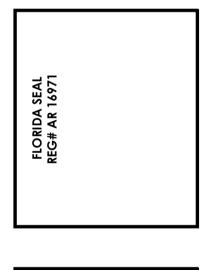
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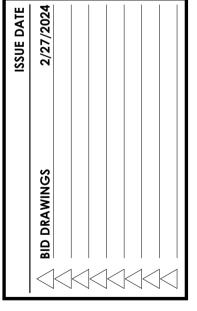
<u>GENERAL NOTES</u>	
1. ALL NON-GALVALUM EXPOSED VERTIC OF EXISTING BUILDING.	CAL FLASHINGS TO BE PAINTED TO MATCH FIELD COLOR
BASIS OF DESIGN:	
CEDAR SHAKE SHINGLES; CCA TREATED ((MECH. ATTACHED AND TO MATCH EXIS)	CEDAR SHAKES SPLIT AND RESAWN 24'' x 3/4'' MEDIUM TING)
BEAM HEIGHT LEGEND	
DESCRIPTION	DESCRIPTION
TOP OF BEAM AT END PAVILION = 25'- 3 5/32"	
TOP OF BEAM AT MID PAVILION = 22'- 3 11/32''	
TOP OF BEAM AT PIER ACCESS/CONCESSIONS = 18'-6 23/32''	
TOP OF BEAM AT DORMERS = 23'-1 7/32"	
RAKED BEAM	



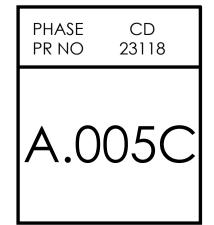


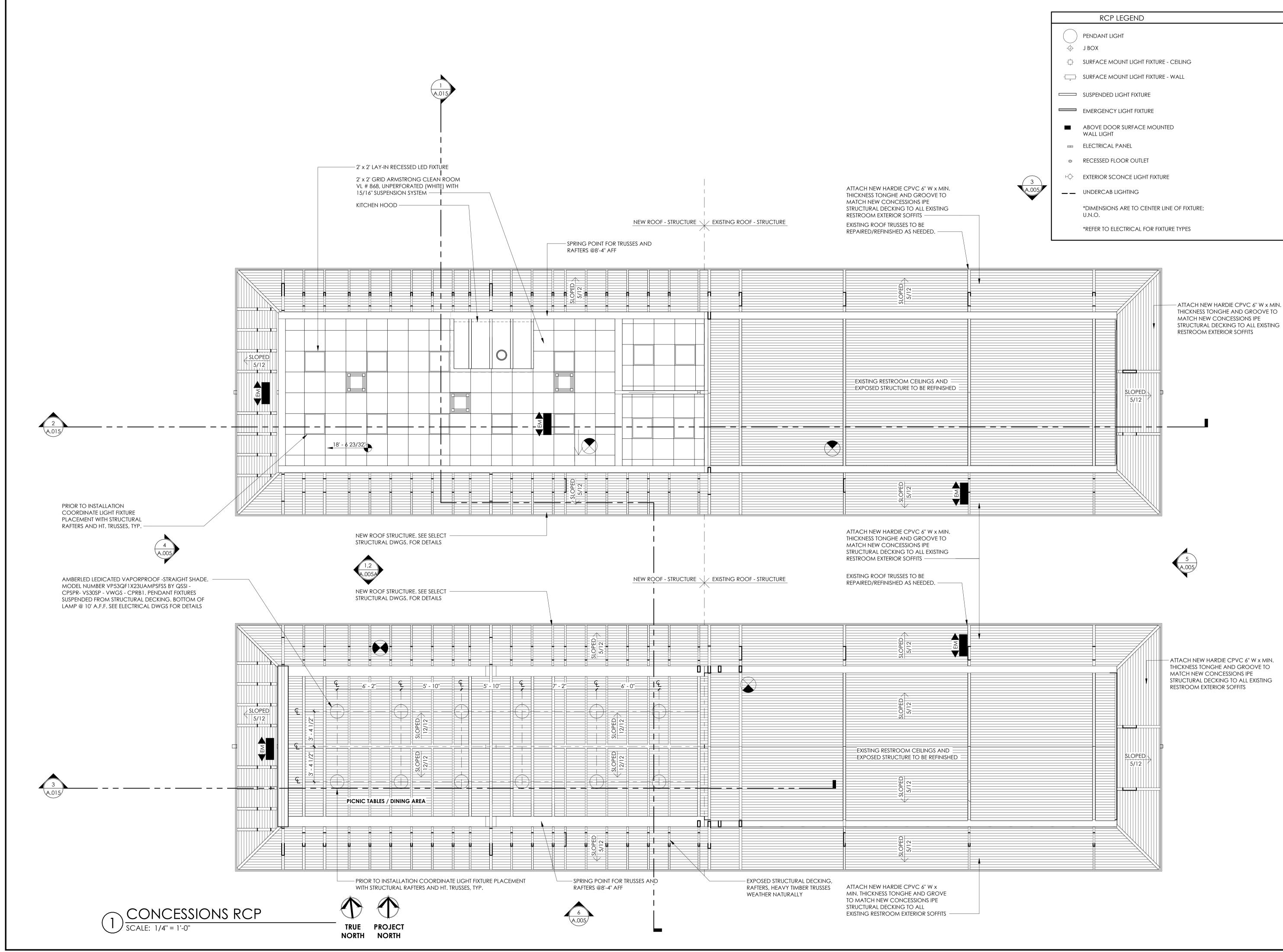




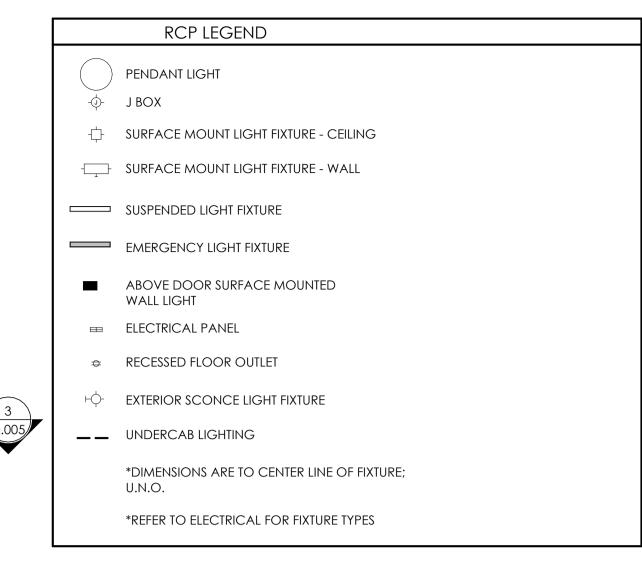


ROOF PLANS





24-011 Naples Pier Reconstruction - ITB



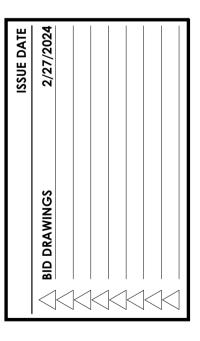
- ATTACH NEW HARDIE CPVC 6" W x MIN. THICKNESS TONGHE AND GROOVE TO MATCH NEW CONCESSIONS IPE STRUCTURAL DECKING TO ALL EXISTING RESTROOM EXTERIOR SOFFITS



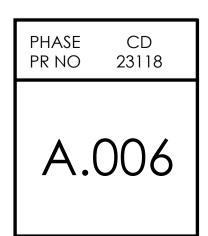
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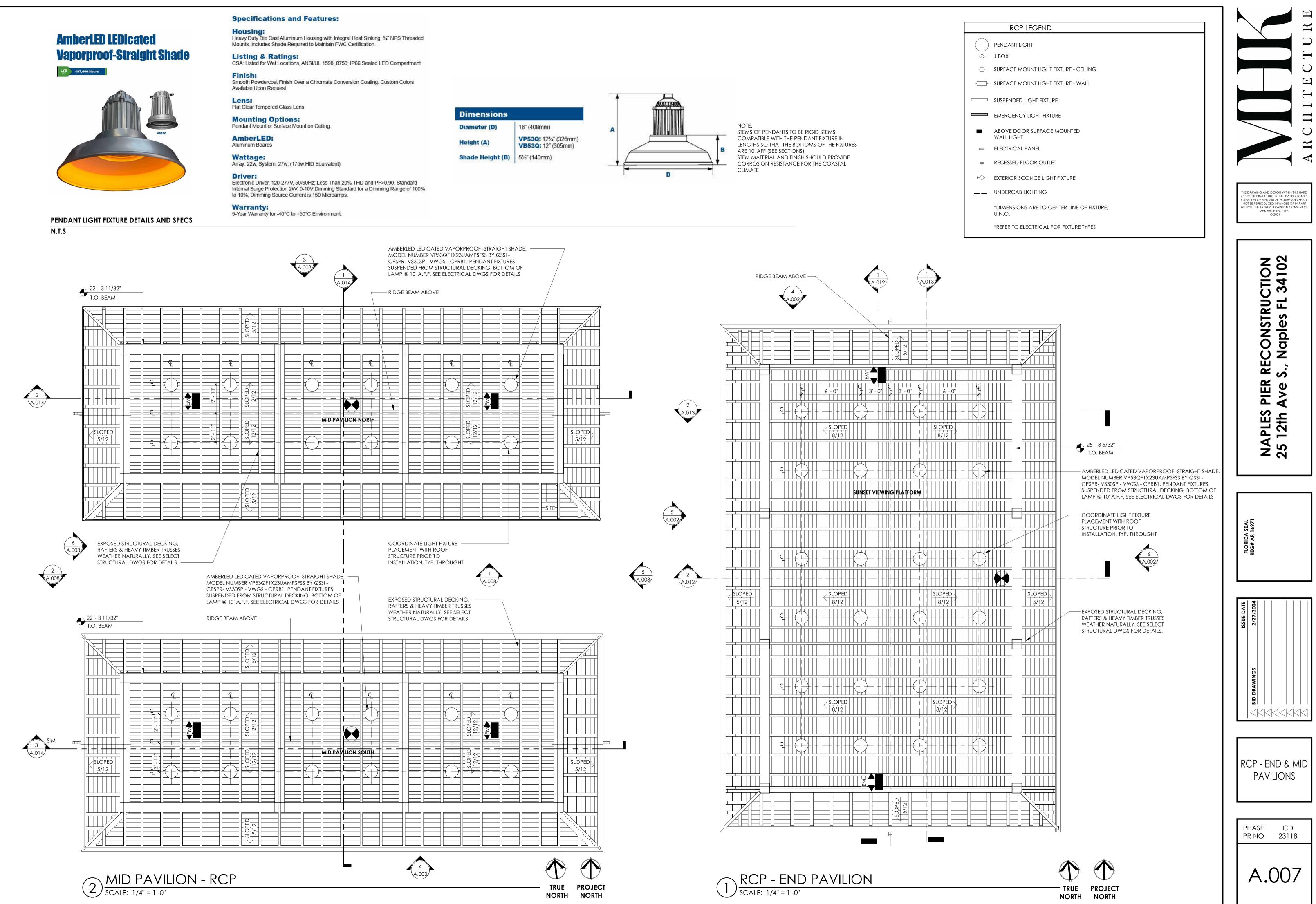








Lens:

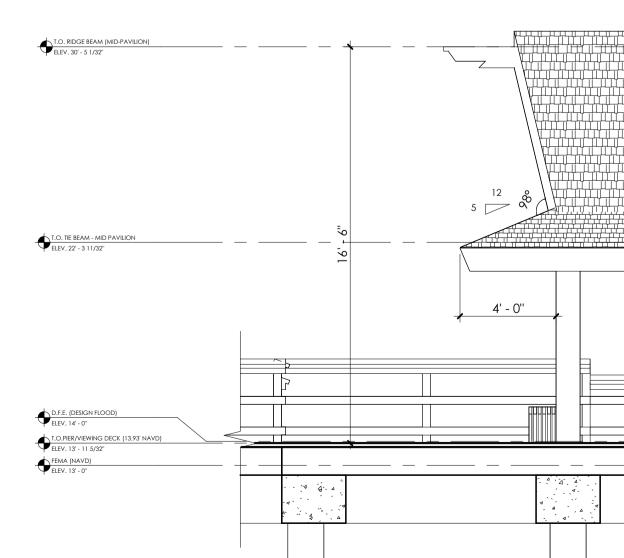


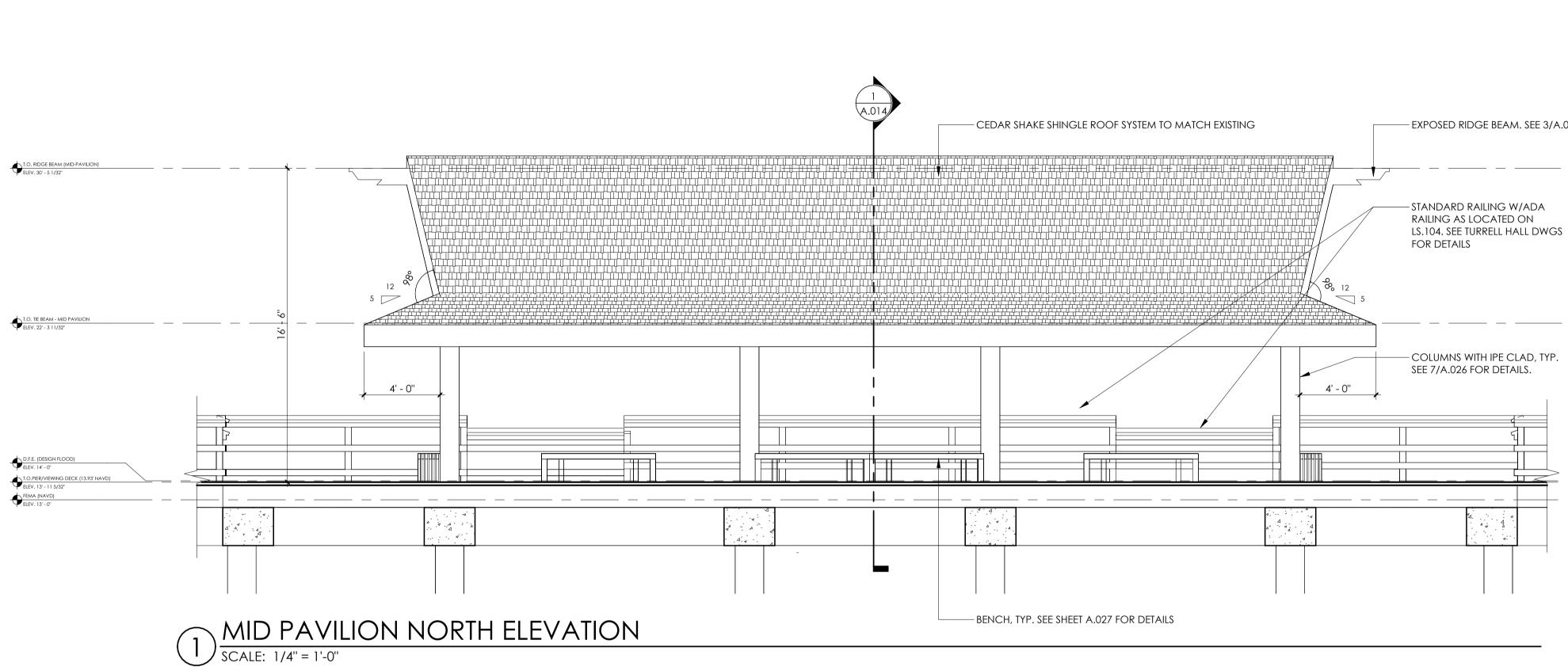
City of Naples

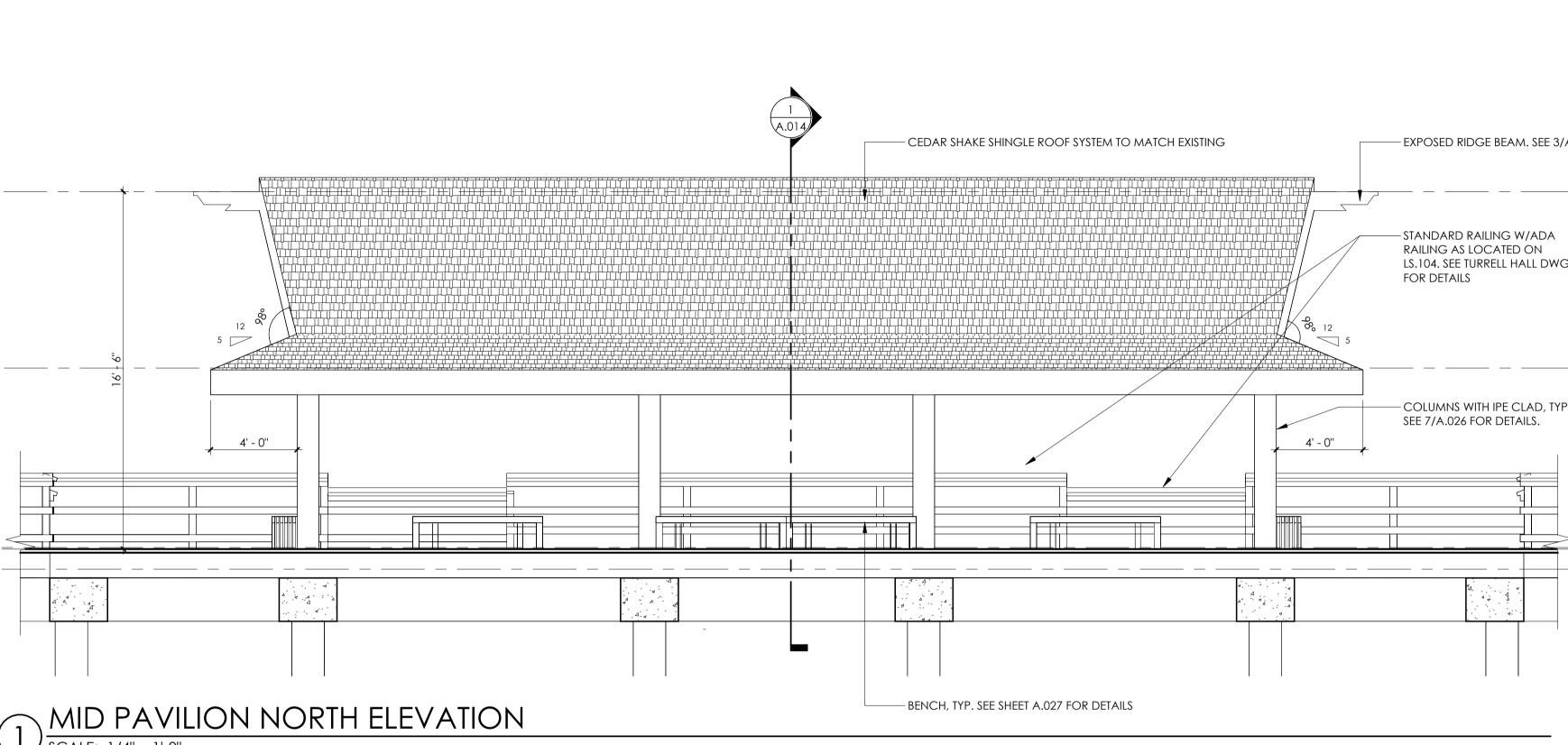
24-011 Naples Pier Reconstruction - ITB







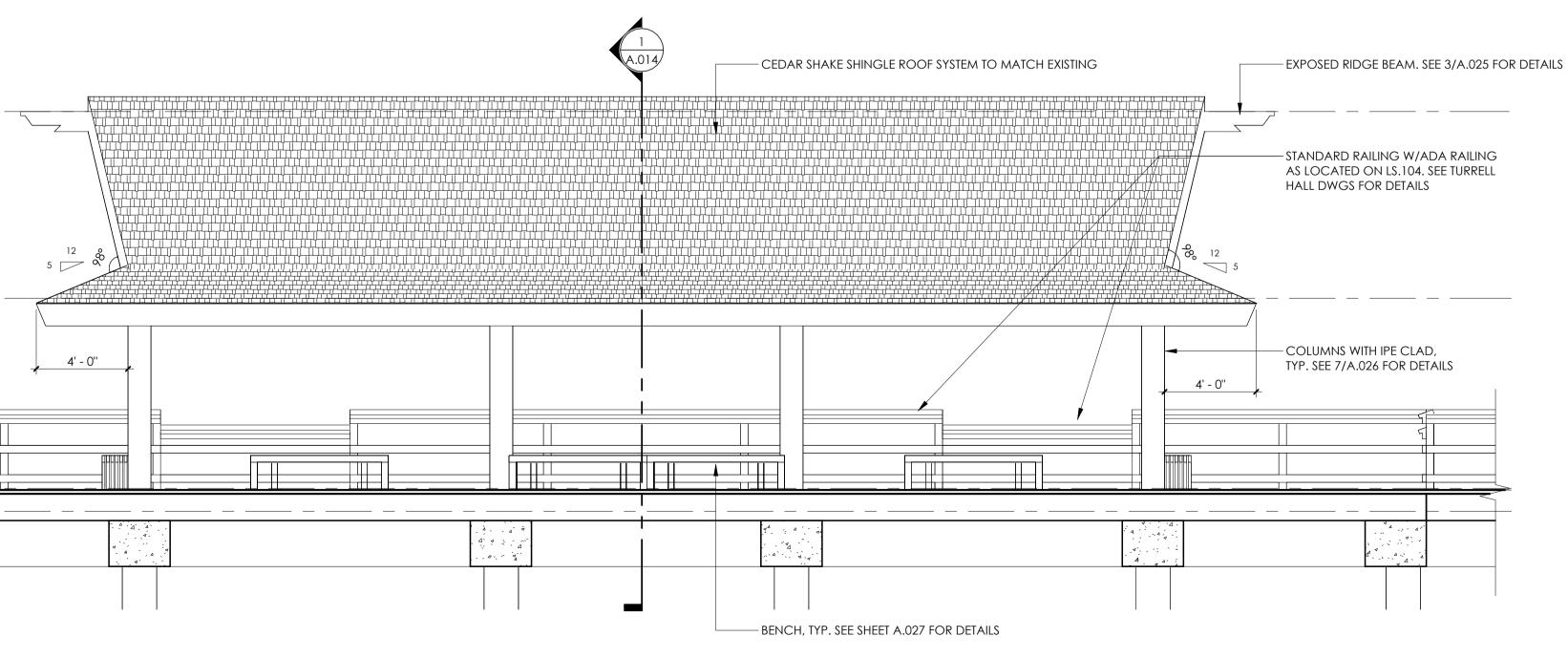




MAX. NAVD HEIGHT

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City of Naples



- EXPOSED RIDGE BEAM. SEE 3/A.025 FOR DETAILS

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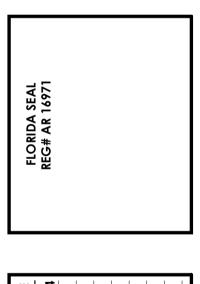
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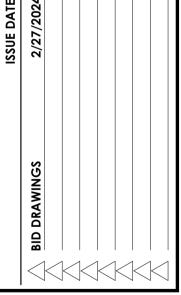
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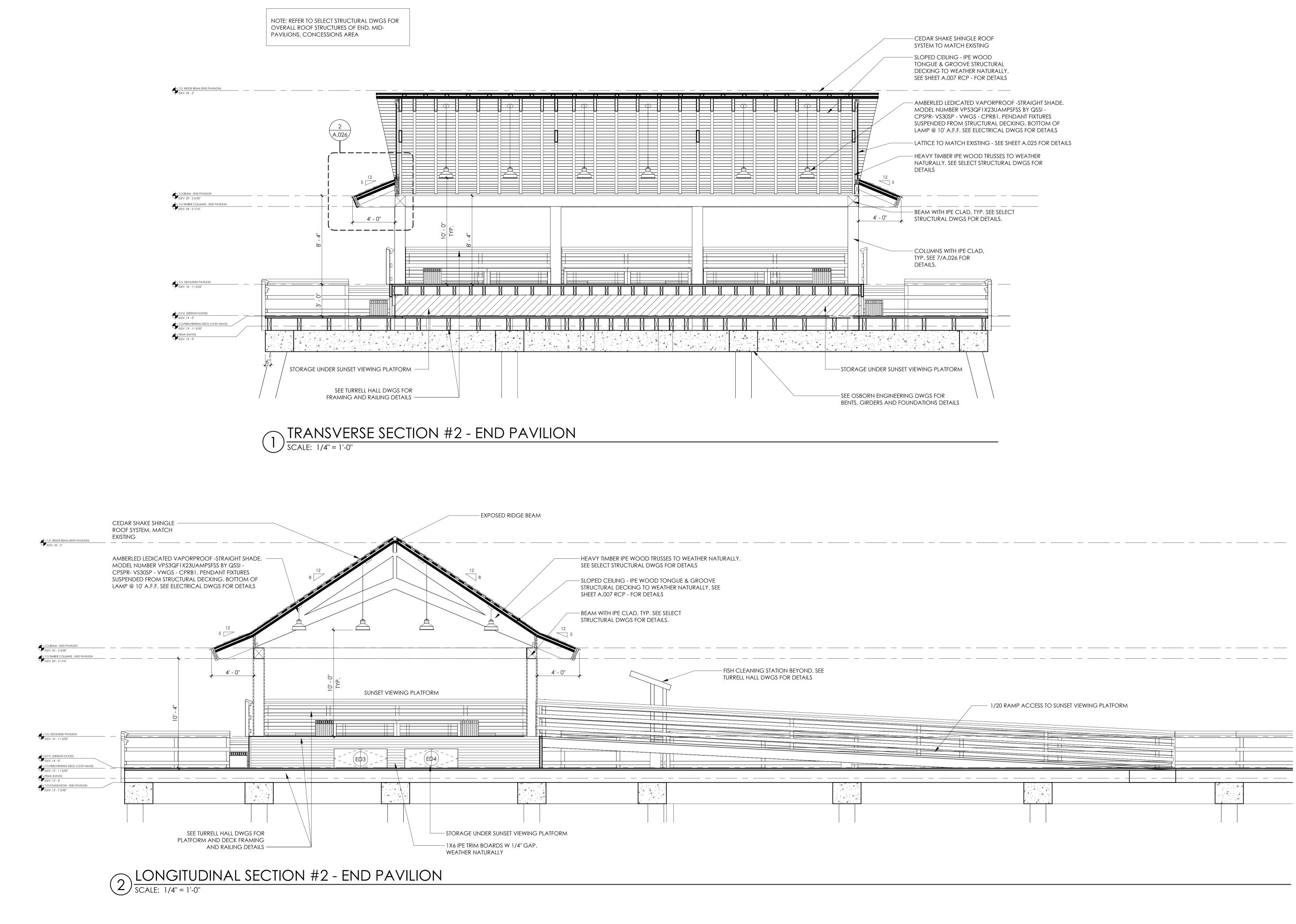
CTION . 34102 CONSTRUC R S., PIER NAPLES 25 12th /



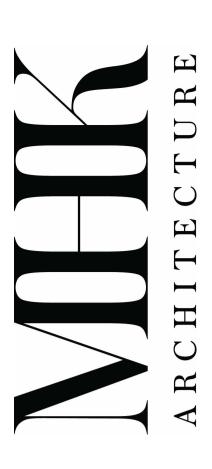


MID-PAVILION ELEVATIONS

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PR NO	23118
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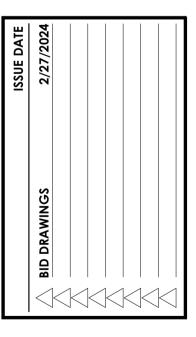
EXPOS	ed Ridge beam			
12 8	S S S B	HEAVY TIMBER IPE WOOD TRUSSES TO WEATH SEE SELECT STRUCTURAL DWGS FOR DETAILS SLOPED CEILING - IPE WOOD TONGUE & GRO STRUCTURAL DECKING TO WEATHER NATURAL SHEET A.007 RCP - FOR DETAILS SEAM WITH IPE CLAD, TYP. SEE SELECT STRUCTURAL DWGS FOR DETAILS.	DOVE	
			FISH CLEANING STATION BEYOND. SEE TURRELL HALL DWGS FOR DETAILS	
STORAGE UNDER SU				
1X6 IPE TRIM BOARD WEATHER NATURALL				



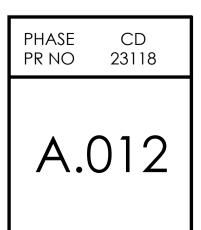


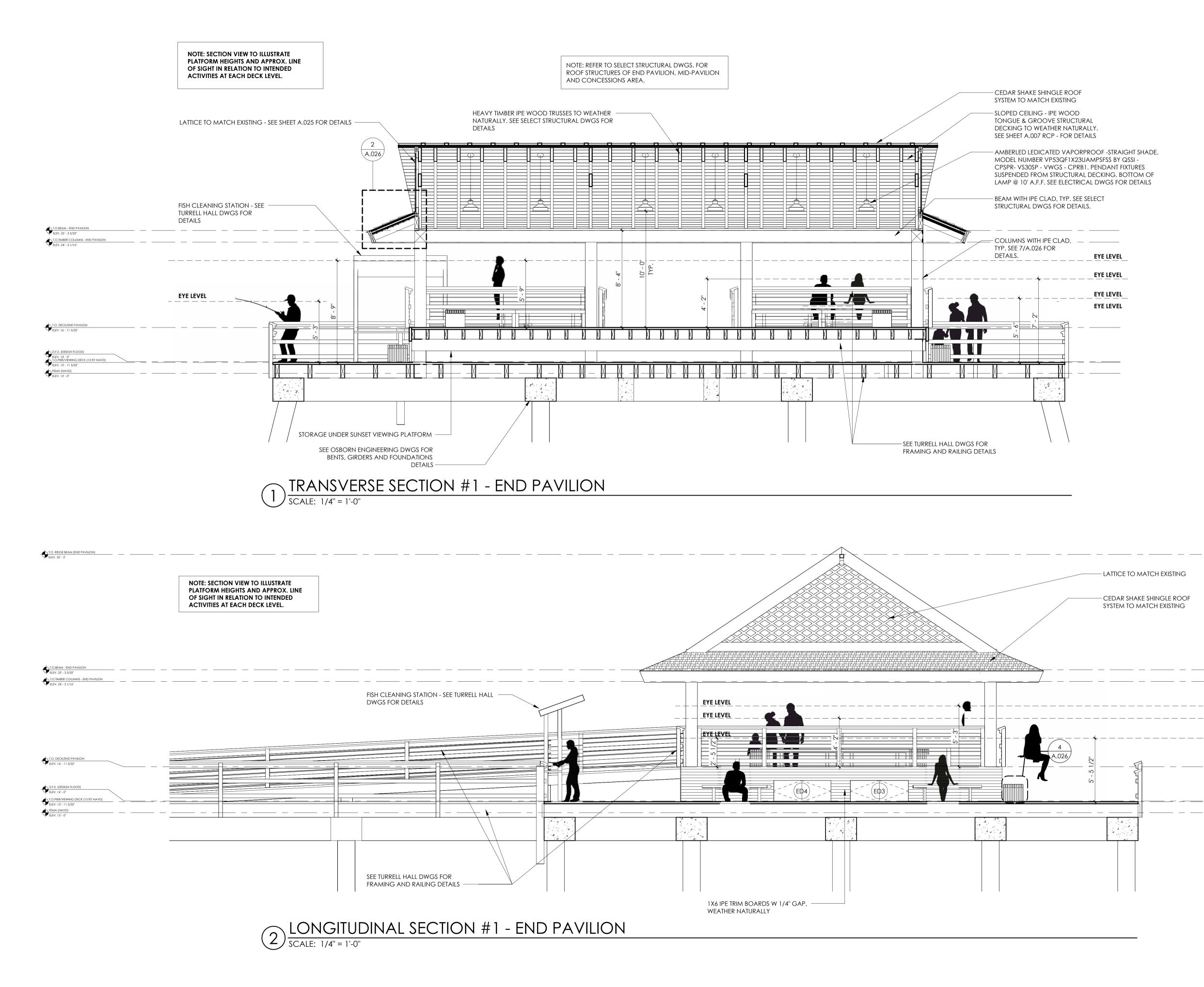
CTION . 34102 CONSTRUC Naples FL Ш S., PIER Ave APLES 12th NA 25 1

FLORIDA SEAL Reg# Ar 16971







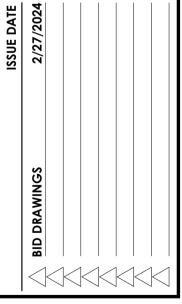


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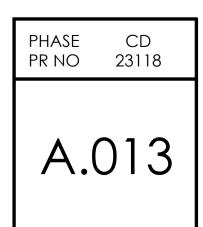


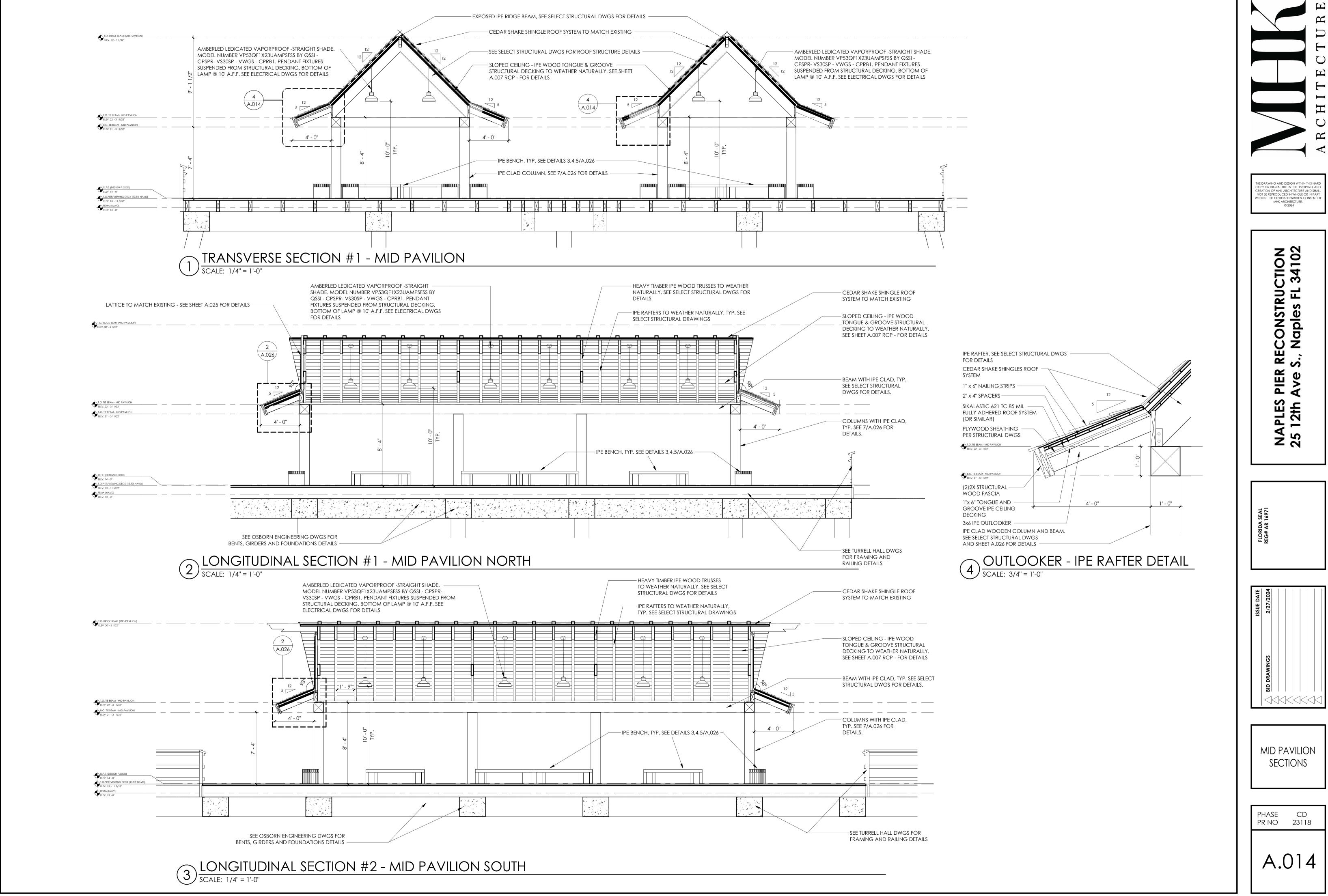
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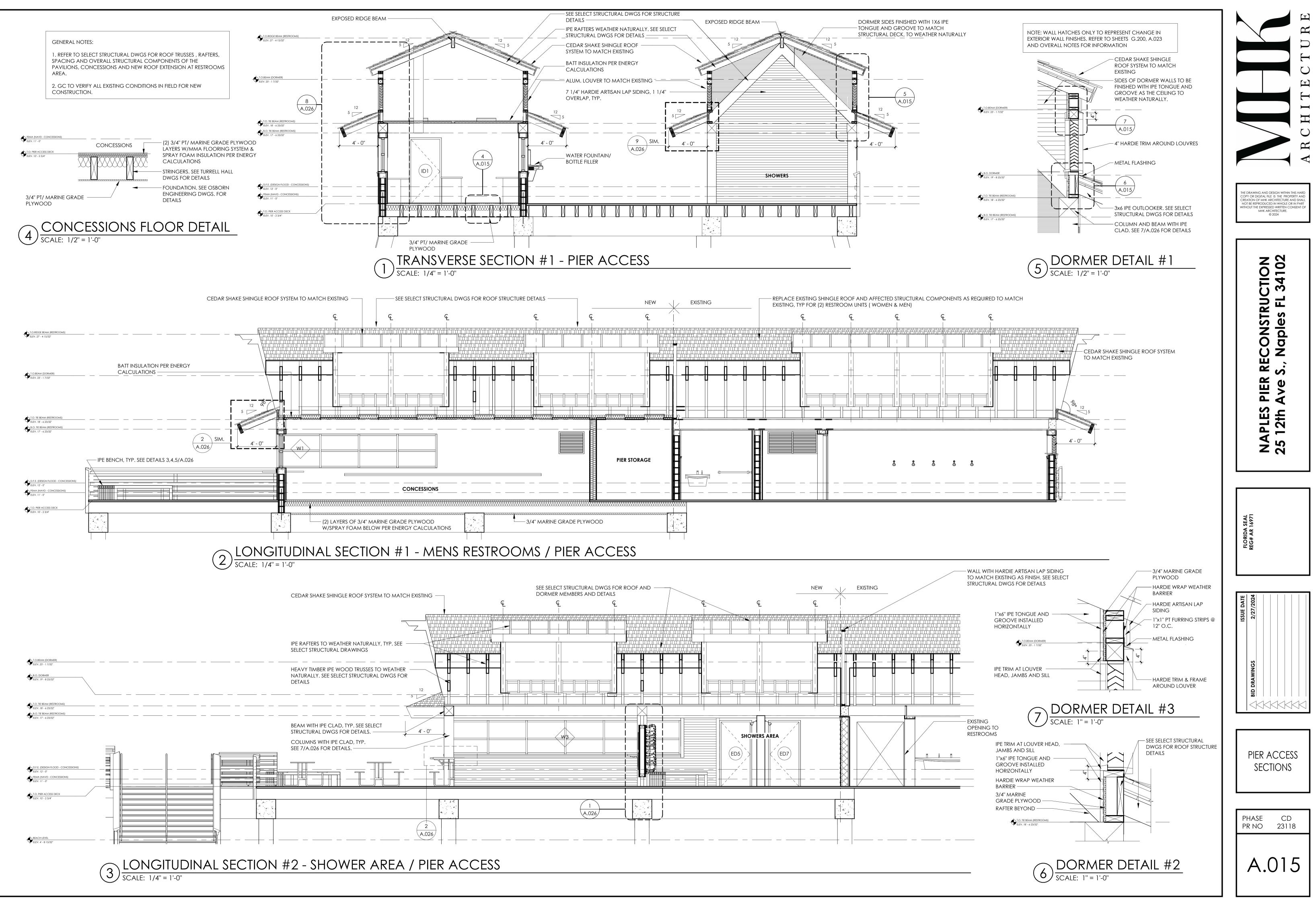
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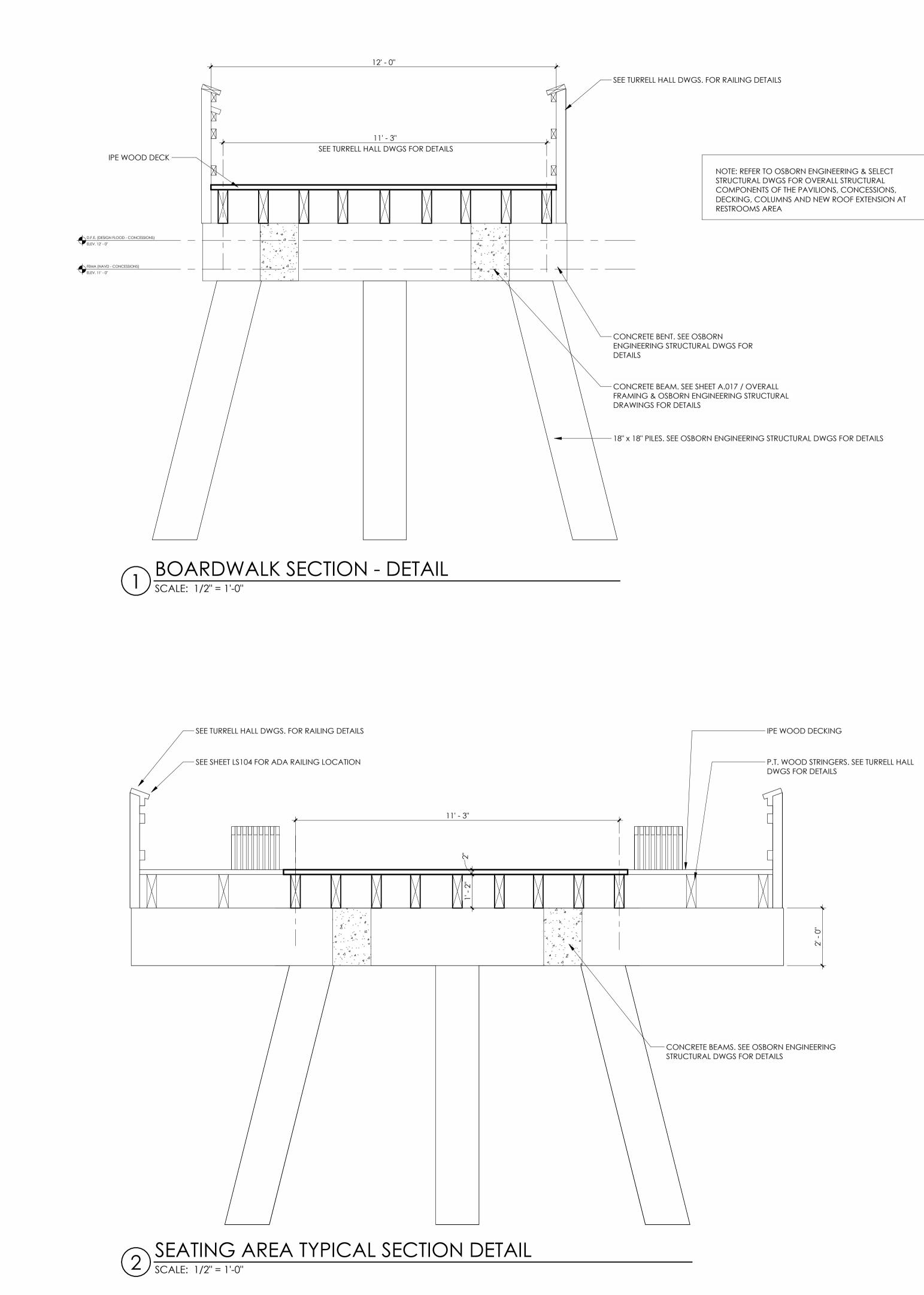
END PAVILION SECTIONS





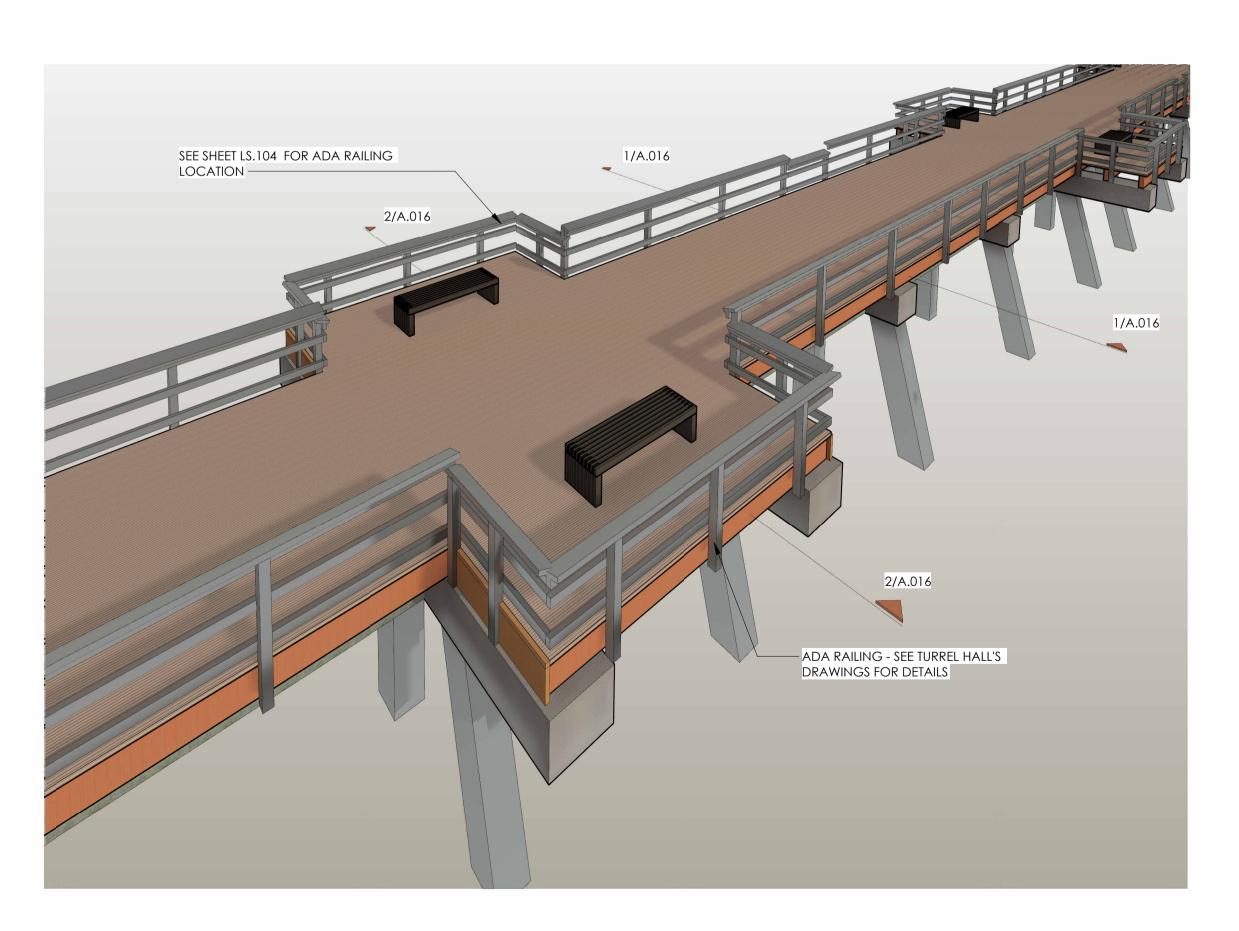




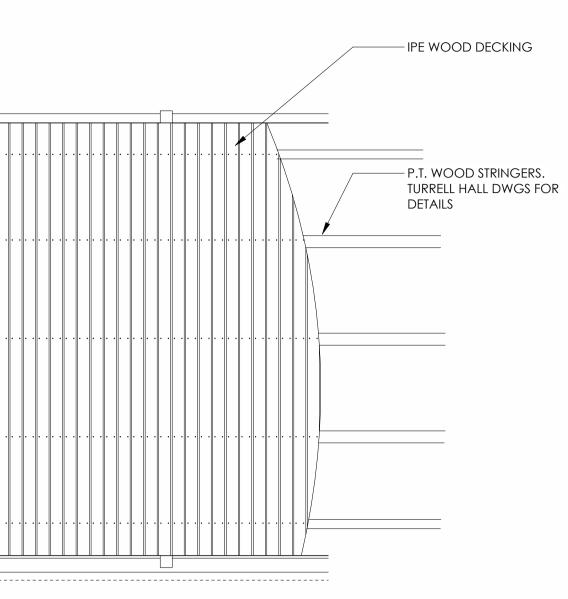


SEE TURREL HALL'S DWGS. FOR _____ RAILING DETAILS ____

4 DECKING - NAILING DETAIL



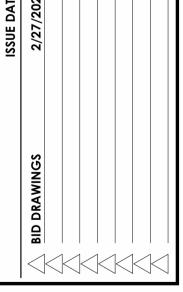




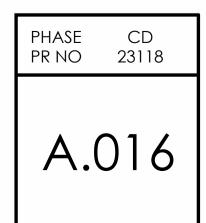


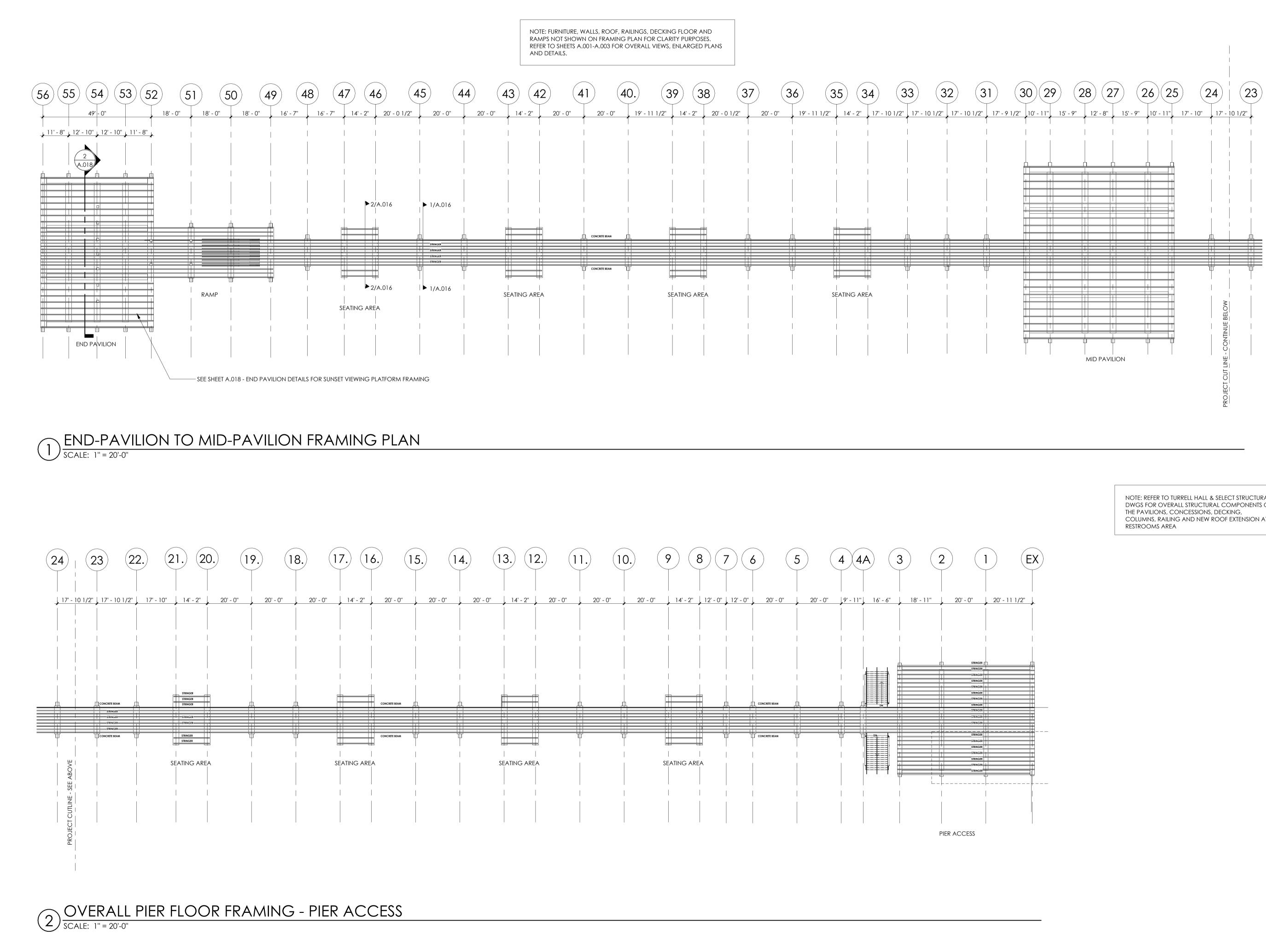
CTION . 34102 CONSTRUC RE(S., | PIER Ave NAPLES 25 12th /





SEATING/DECKING SECTIONS





NOTE: REFER TO TURRELL HALL & SELECT STRUCTURAL DWGS FOR OVERALL STRUCTURAL COMPONENTS OF COLUMNS, RAILING AND NEW ROOF EXTENSION AT



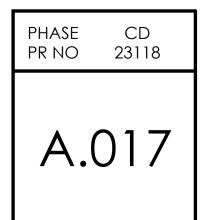
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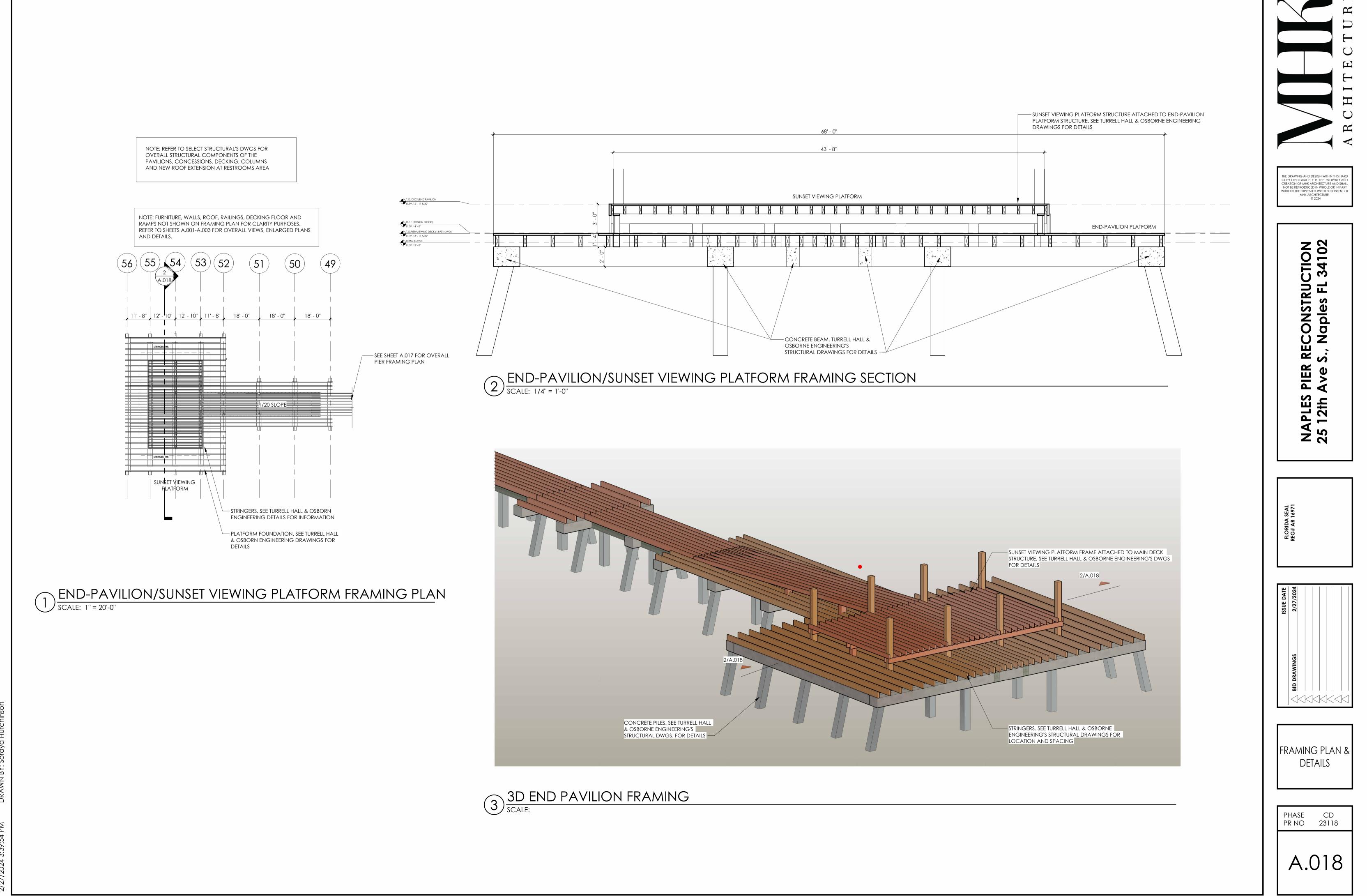
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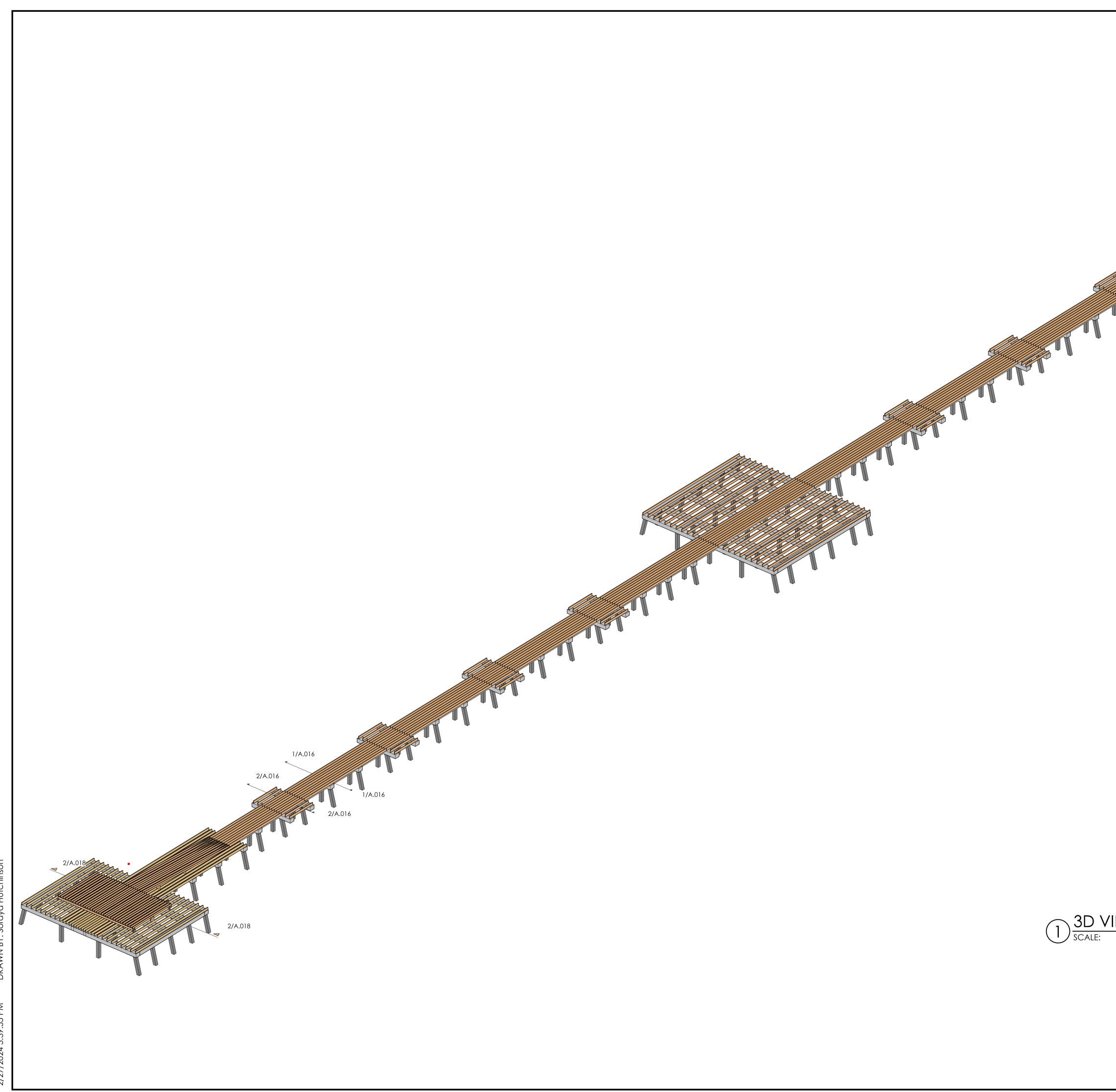
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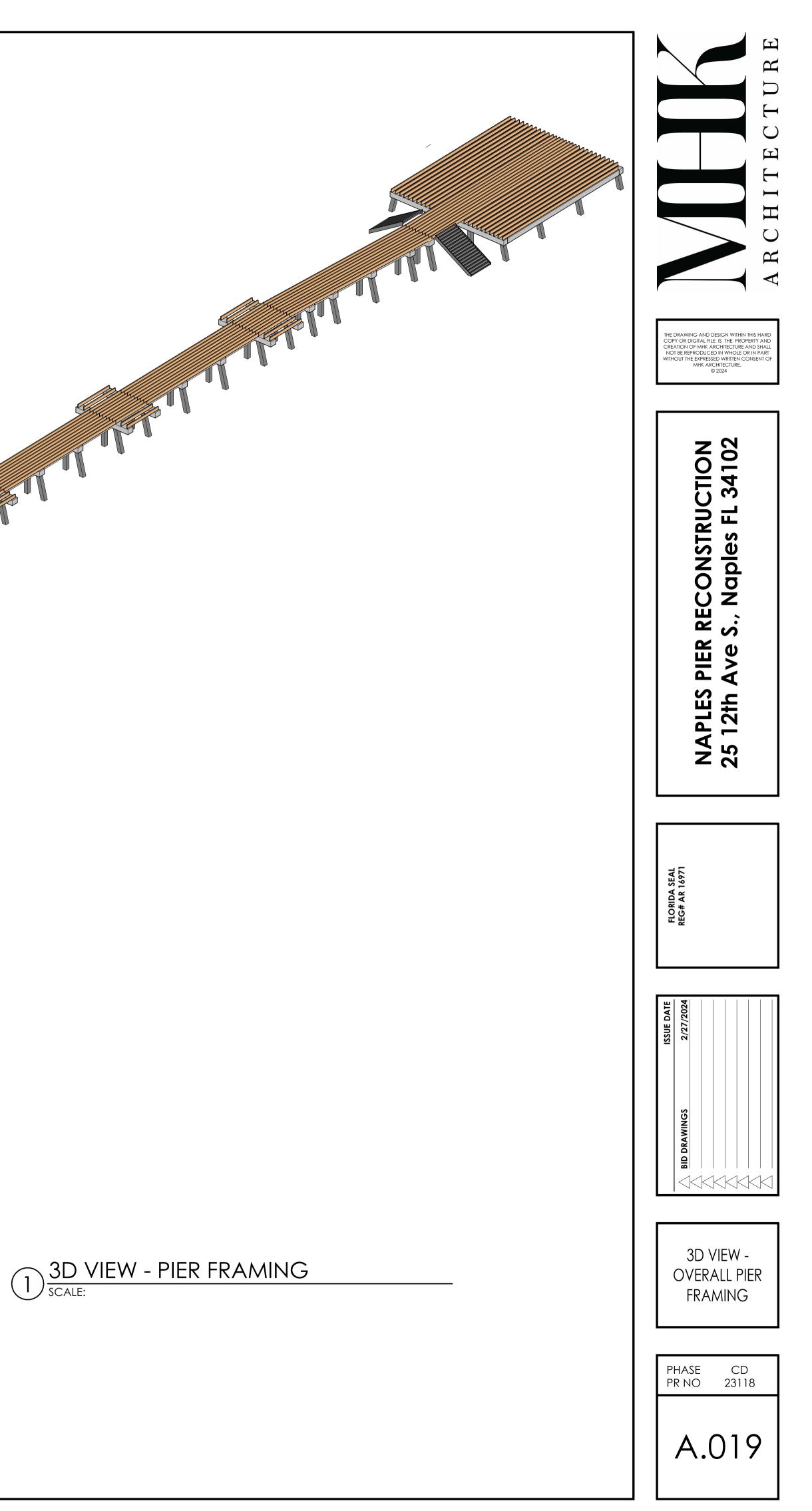
> OVERALL FRAMING

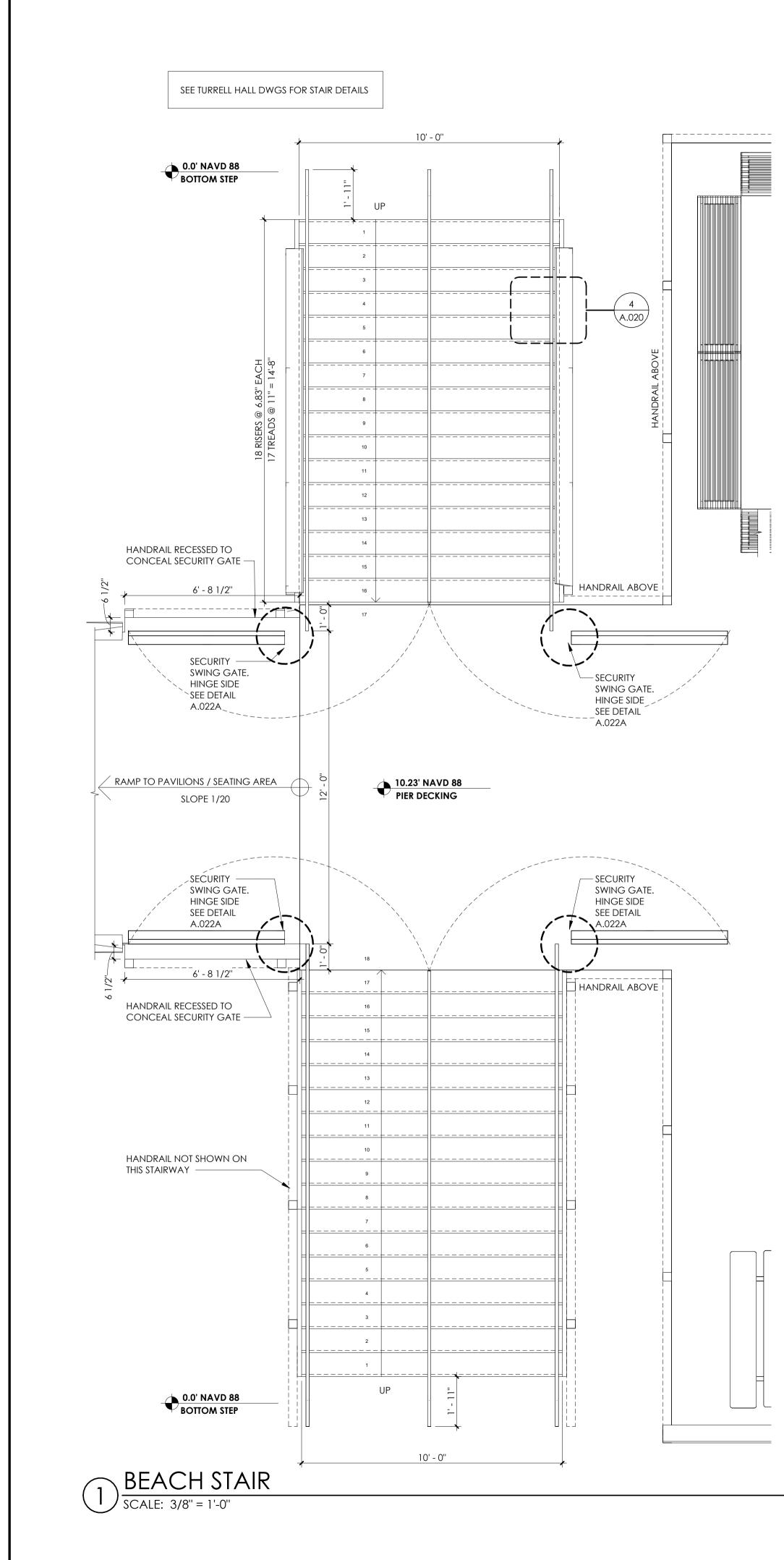


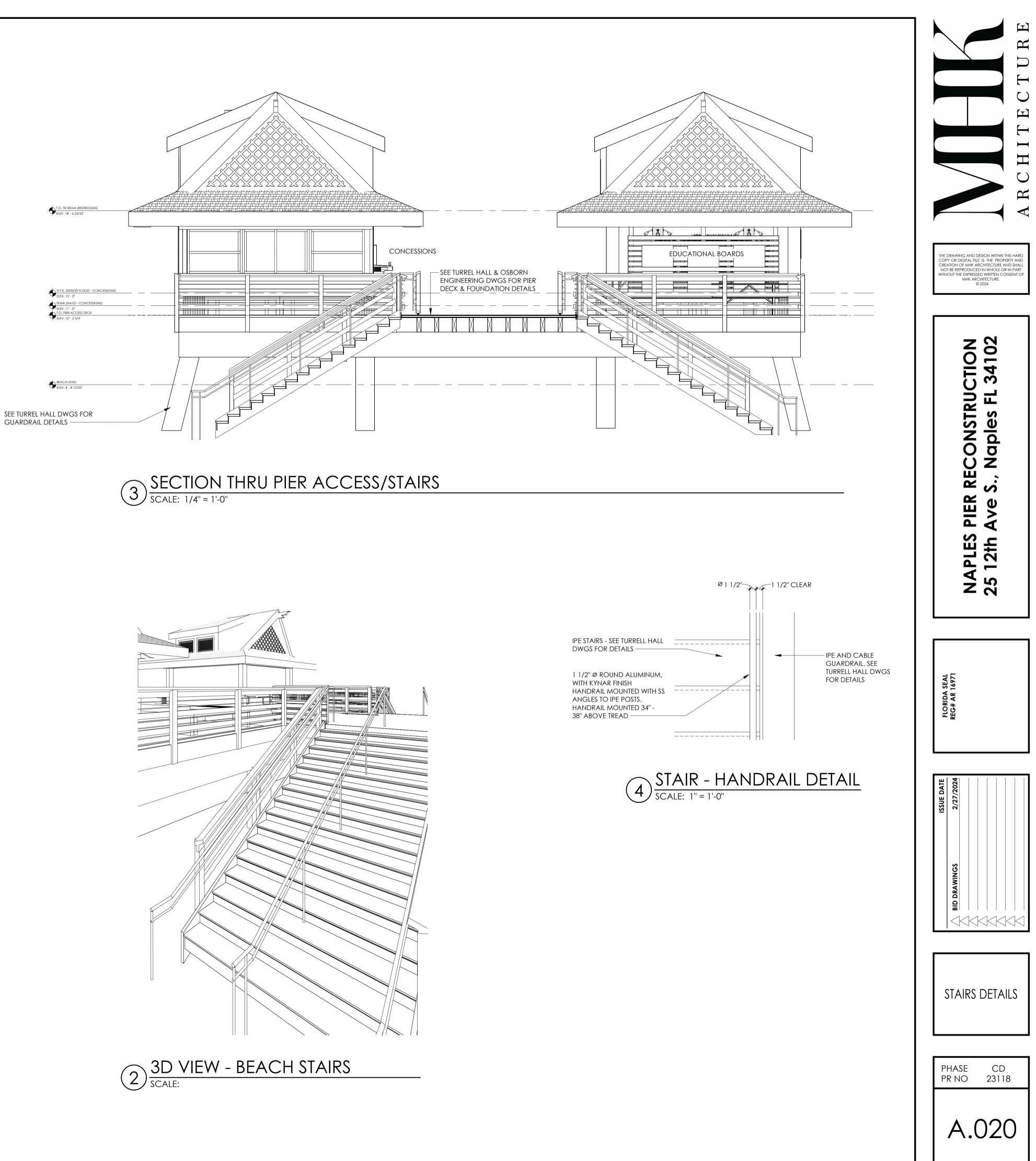




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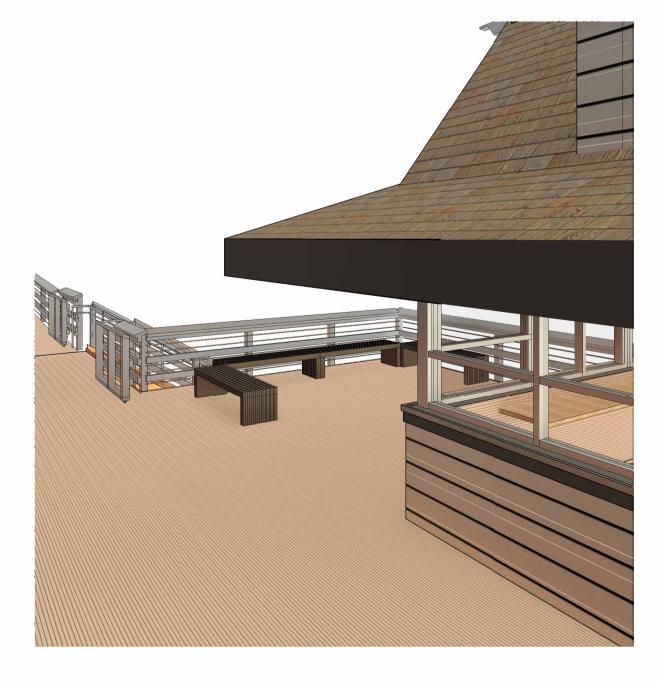












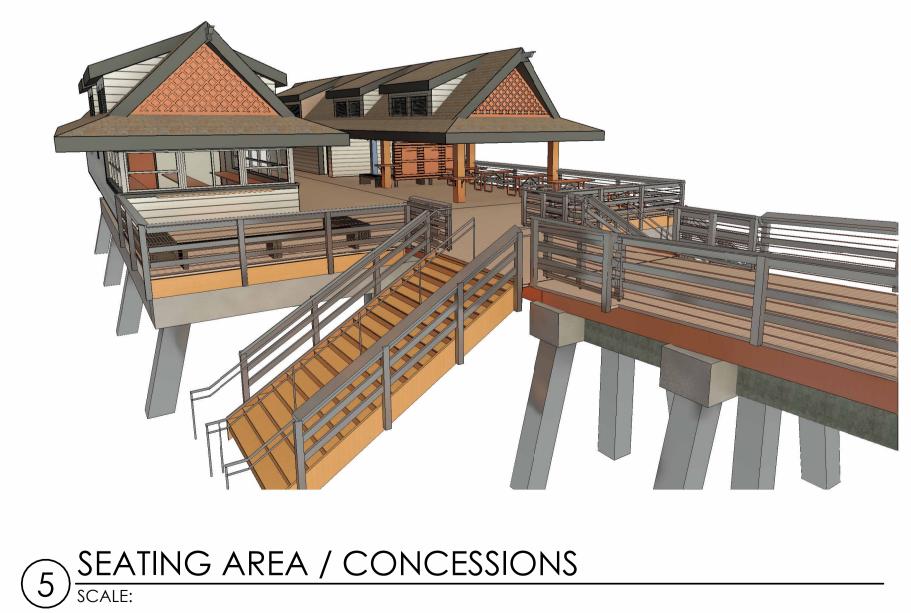




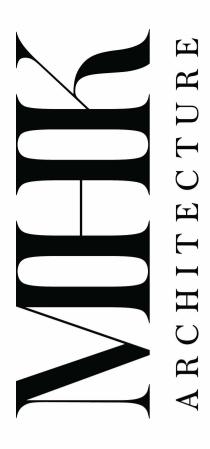






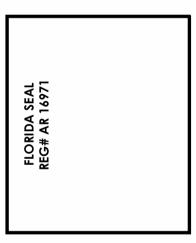


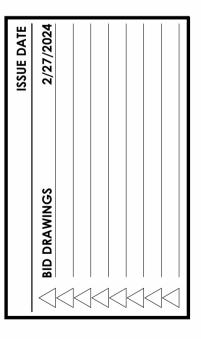
3 3D VIEW - ORDER AREA AT CONCESSIONS

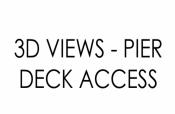




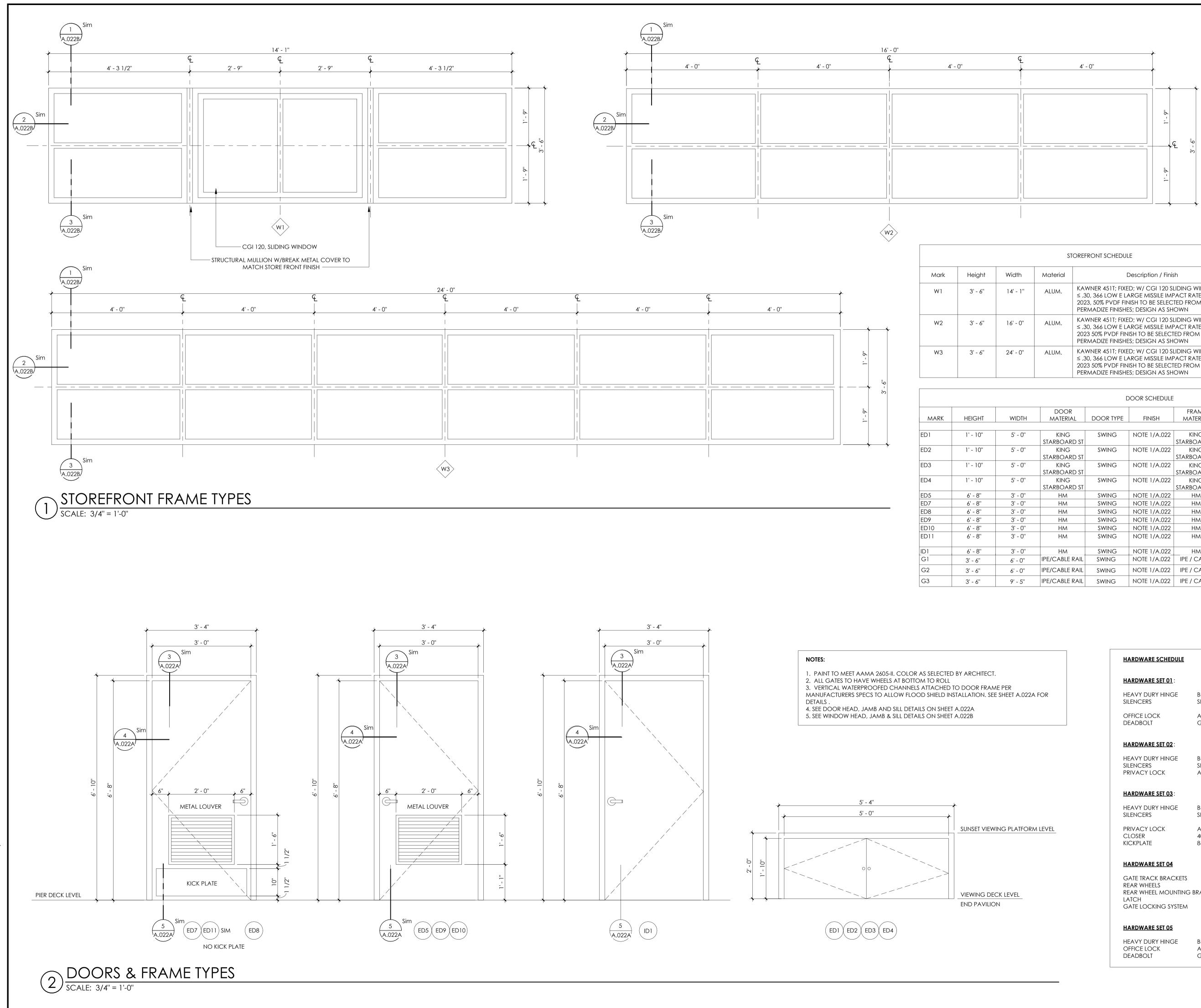
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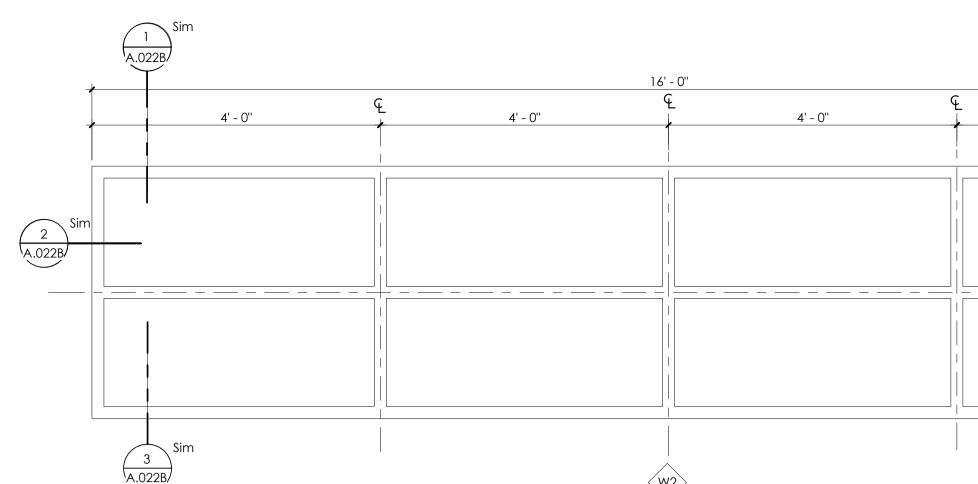






PHASE CD PR NO 23118 A.021





			S	TOREFRONT SCHEDULE	
Mark	Height	Width	Material	Description / Finish	Count
WI	3' - 6"	14' - 1''	ALUM.	KAWNER 451T; FIXED; W/ CGI 120 SLIDING WINDOW; GLAZING, VT ≤ .30, 366 LOW E LARGE MISSILE IMPACT RATED PER FBC - 8TH ED. 2023, 50% PVDF FINISH TO BE SELECTED FROM PERMACOAT AND PERMADIZE FINISHES; DESIGN AS SHOWN	1
W2	3' - 6"	16' - 0''	ALUM.	KAWNER 451T; FIXED; W/ CGI 120 SLIDING WINDOW; GLAZING, VT ≤ .30, 366 LOW E LARGE MISSILE IMPACT RATED PER FBC - 8TH ED, 2023 50% PVDF FINISH TO BE SELECTED FROM PERMACOAT AND PERMADIZE FINISHES; DESIGN AS SHOWN	1
W3	3' - 6"	24' - 0''	ALUM.	KAWNER 451T; FIXED; W/ CGI 120 SLIDING WINDOW; GLAZING, VT ≤ .30, 366 LOW E LARGE MISSILE IMPACT RATED PER FBC - 8TH ED. 2023 50% PVDF FINISH TO BE SELECTED FROM PERMACOAT AND PERMADIZE FINISHES; DESIGN AS SHOWN	1

				C	oor schedule				
MARK	HEIGHT	WIDTH	DOOR MATERIAL	DOOR TYPE	FINISH	FRAME MATERIAL	HARDWARE SET	DESCRIPTION	COUNT
ED1	1' - 10''	5' - 0''	KING STARBOARD ST	SWING	NOTE 1/A.022	KING STARBOARD ST	05	UNDER PLATFORM STORAGE	1
ED2	1' - 10''	5' - 0''	KING STARBOARD ST	SWING	NOTE 1/A.022	KING STARBOARD ST	05	UNDER PLATFORM STORAGE	1
ED3	1' - 10''	5' - 0''	KING STARBOARD ST	SWING	NOTE 1/A.022	KING STARBOARD ST	05	UNDER PLATFORM STORAGE	1
ED4	1' - 10''	5' - 0''	KING STARBOARD ST	SWING	NOTE 1/A.022	KING STARBOARD ST	05	UNDER PLATFORM STORAGE	1
ED5	6' - 8''	3' - 0''	HM	SWING	NOTE 1/A.022	НМ	01	CONCESSIONS/ SEE NOTE 3	1
ED7	6' - 8''	3' - 0''	HM	SWING	NOTE 1/A.022	HM	01	PIER STORAGE/SEE NOTE 3	1
ED8	6' - 8''	3' - 0''	HM	SWING	NOTE 1/A.022	HM	03	FAMILY CARE	1
ED9	6' - 8''	3' - 0''	HM	SWING	NOTE 1/A.022	HM	02	CHANGING ROOM	1
ED10	6' - 8''	3' - 0''	HM	SWING	NOTE 1/A.022	HM	01	MEN'S RESTROOM UTILITY	1
ED11	6' - 8''	3' - 0''	НМ	SWING	NOTE 1/A.022	НМ	01	WOMEN'S RESTROOM UTILITY	1
ID1	6' - 8''	3' - 0''	HM	SWING	NOTE 1/A.022	HM	01	CONCESSIONS STORAGE	1
Gl	3' - 6''	6' - 0''	IPE/CABLE RAIL	SWING	NOTE 1/A.022	IPE / CABLE	04	BEACH STAIR / SEE NOTE 2	2
G2	3' - 6''	6' - 0''	IPE/CABLE RAIL	SWING	NOTE 1/A.022	IPE / CABLE	04	BEACH STAIR / SEE NOTE 2	2
G3	3' - 6''	9' - 5''	IPE/CABLE RAIL	SWING	NOTE 1/A.022	IPE / CABLE	04	PARKING / PIER ACCESS	2

FOR	

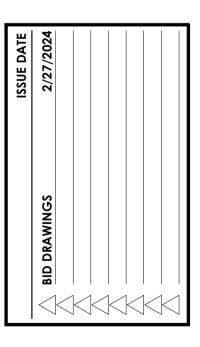
HARDWARE SET 01:			
HEAVY DURY HINGE	BB1279 4 1/2" x 4 1/2"	630	
SILENCERS	SR64	GRAY	
OFFICE LOCK	AL50PD STYLE 12 W/ VANDLGARD	630	
DEADBOLT	GRADE 1 MORTISE LOCK	630	
HARDWARE SET 02:			
HEAVY DURY HINGE	BB1279 4 1/2" x 4 1/2"	630	IVES
SILENCERS	SR64	GRAY	
PRIVACY LOCK	AL40S STYLE 12	630	
HARDWARE SET 03:			
HEAVY DURY HINGE	BB1279 4 1/2" x 4 1/2"	630	
SILENCERS	SR64	GRAY	
PRIVACY LOCK	AL40S STYLE 12	630	SCHLAC
CLOSER	4030-3049	630	LCN
KICKPLATE	8400 / 8401	630	IVES
HARDWARE SET 04			
GATE TRACK BRACKETS REAR WHEELS REAR WHEEL MOUNTIN LATCH GATE LOCKING SYSTEM	g brackets		
HARDWARE SET 05			
HEAVY DURY HINGE	BB1279 4 1/2'' x 4 1/2''	630	hager
OFFICE LOCK	AL50PD STYLE 12 W/ VANDLGARD	630	Schlac
DEADBOLT	GRADE 1 MORTISE LOCK	630	Schlac







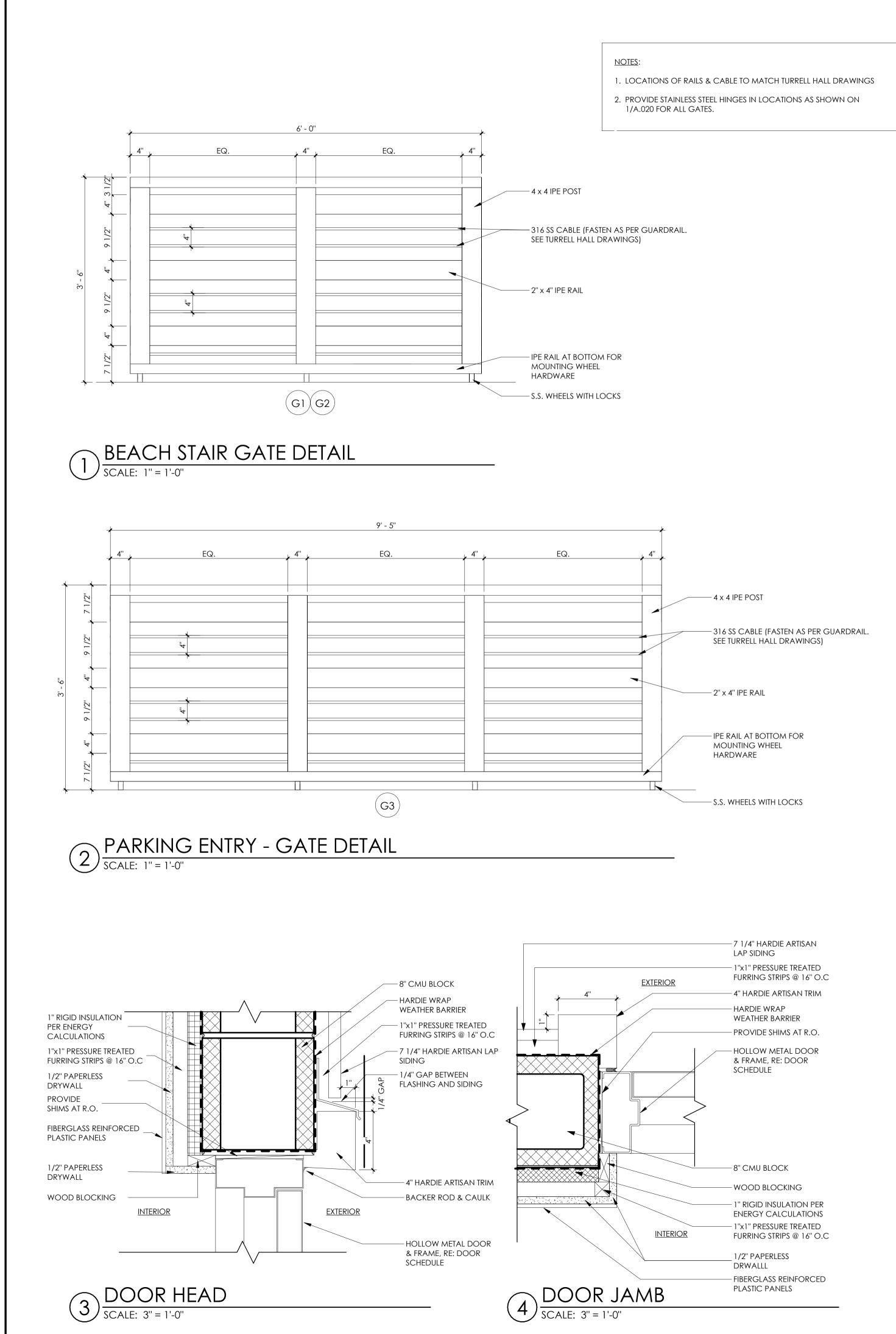
FLORIDA SEAL REG# AR 16971





PHASE	CD
PR NO	23118
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Flood Shield

Installation Instructions

- . Position mounting channels with radius corners up, in desired location with larger holes facing exterior.
- 2. With channels vertically aligned, mark screw holes.
- 3. Drill pilot holes for screws using 9/64" drill bit. When using plastic anchor, use 1/4" drill bit.
- 4. Apply continuous bead of waterproof caulk to center of mounting side of channels.
- 5. Install channels with screws provided.
- 6. Caulk bottom outer edges of channels to floor surface.
- INSER-SUPPORT. PORT Don't. 10,0004 0.0000 10000 10007

Optional Support Post: Bore 8" deep hole in floor surface for 1-1/2" O.D., outer support post, tangent to the center of the interior side of the plate. Install outer post in hole with top flush with floor surface. Cover with dust cap. When inserting shield, remove dust cap and insert inner support post.

Operating Instructions

Inspect channels and floor surface to insure proper working condition.

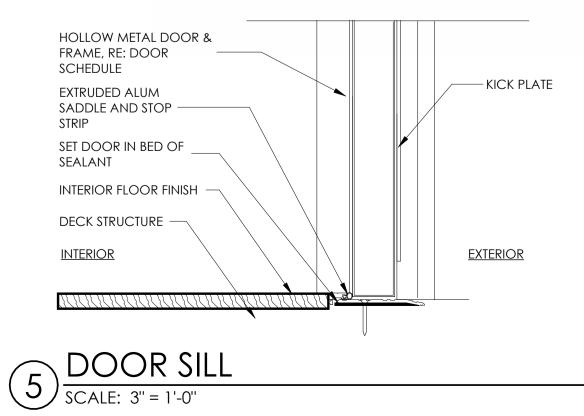
Inserting Shield: With springs and label facing out, insert bottom of plate into channels.

Push outward to compress springs while lowering plate.

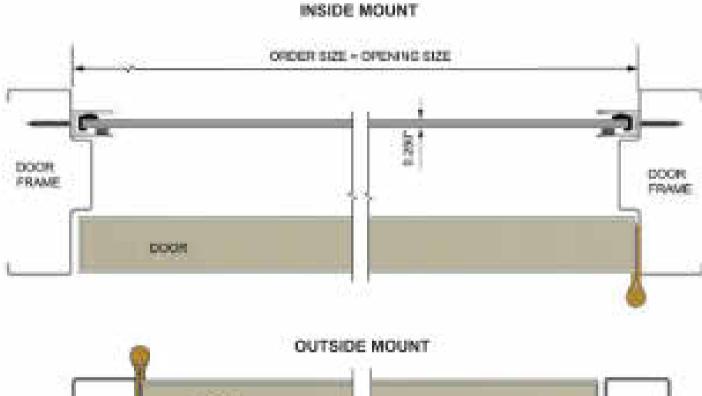
Removing Shield: While compressing springs to remove tension off the gasketing, pull straight up on plate to remove from channel.

Storing Shield: Store the shield plate indoors with no weight against the gasket.

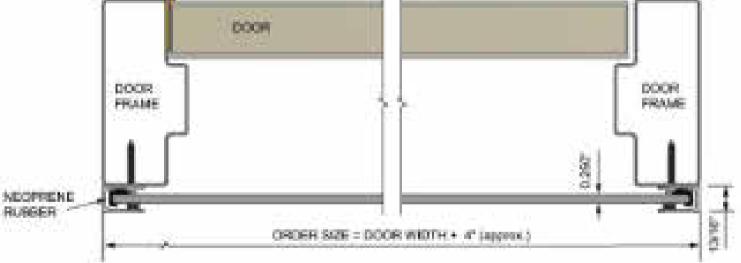
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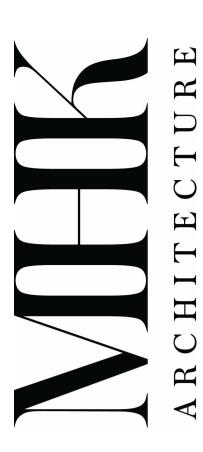


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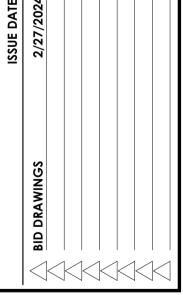




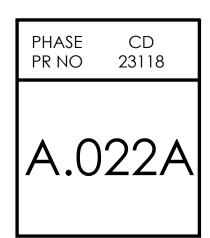


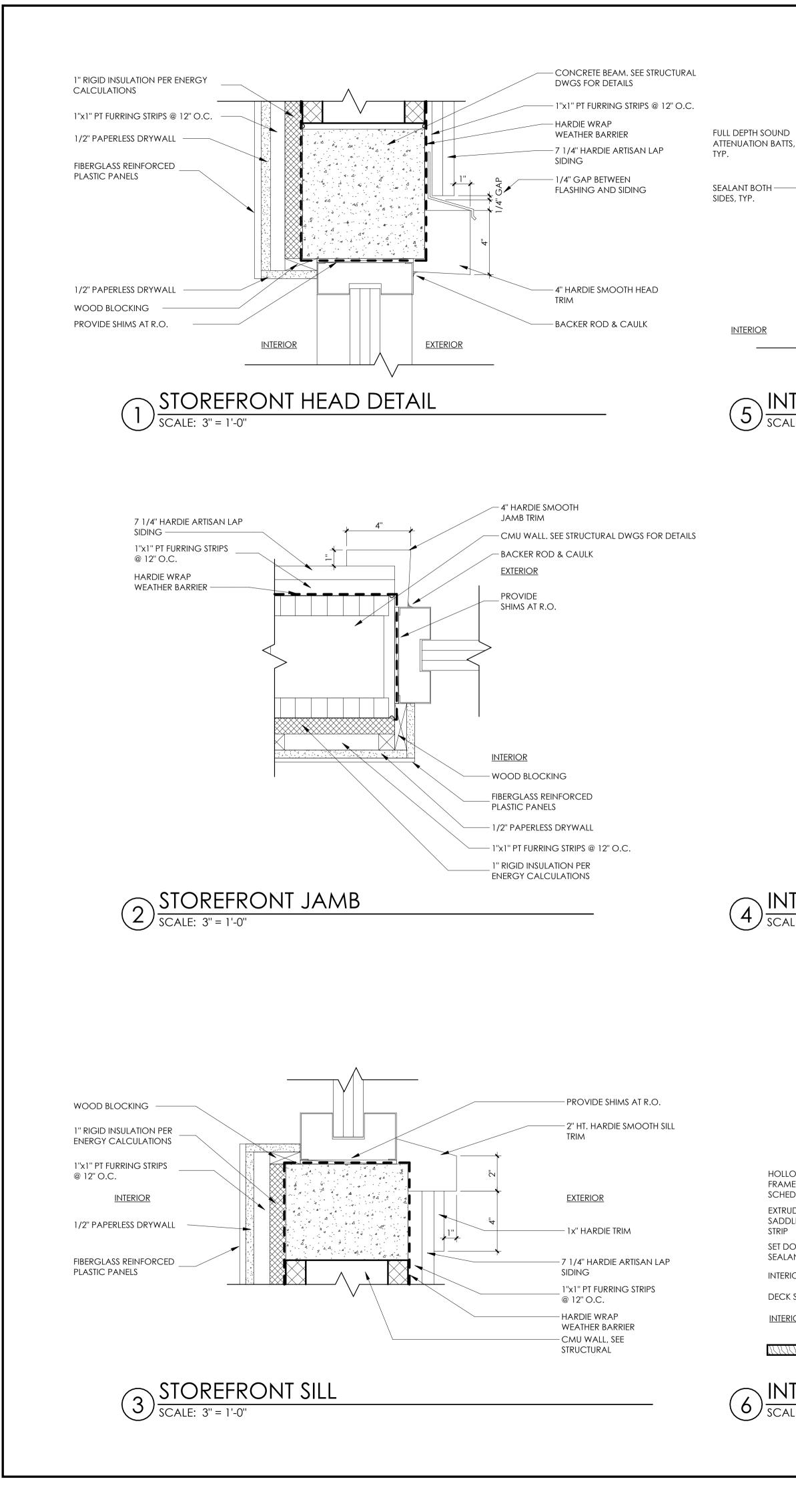
CONSTRUCTION Naples FL 34102 REG S., I PIER Ave NAPLES 25 12th /

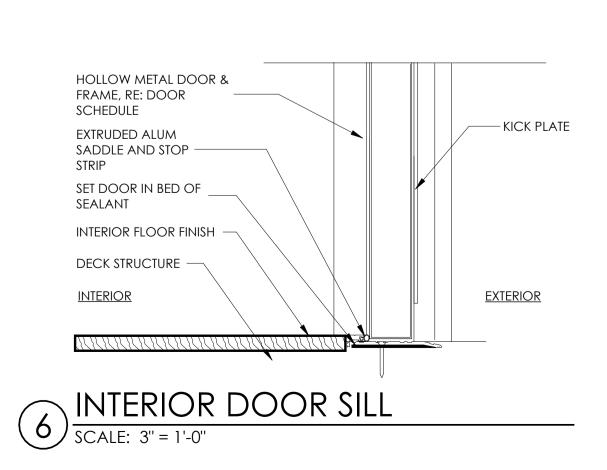


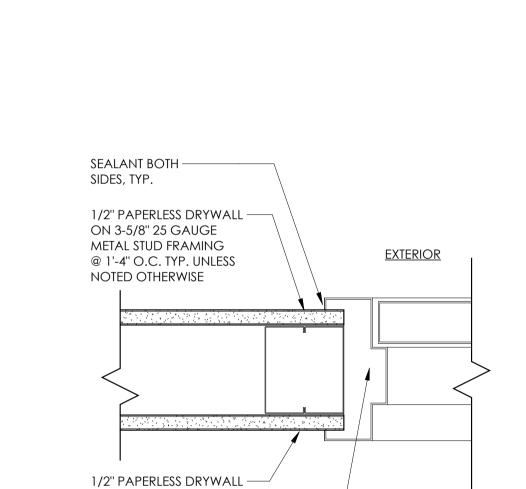












ON 3-5/8" 25 GAUGE

METAL STUD FRAMING

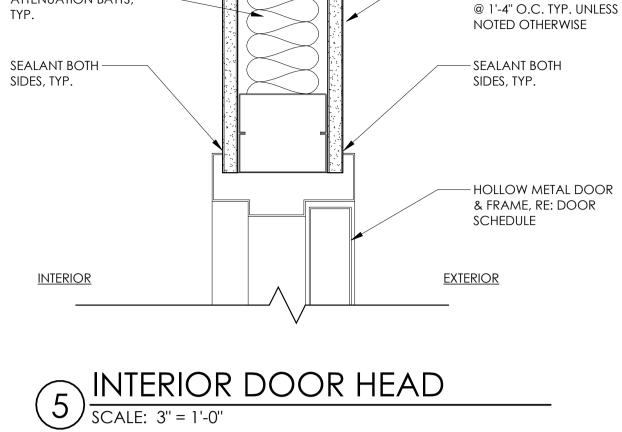
@ 1'-4" O.C. TYP. UNLESS NOTED OTHERWISE

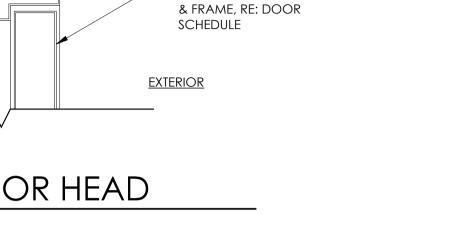
HOLLOW METAL DOOR

4 INTERIOR DOOR JAMB

& FRAME, RE: DOOR

SCHEDULE





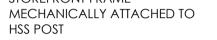
<u>INTERIOR</u>

1/2" PAPERLESS DRYWALL

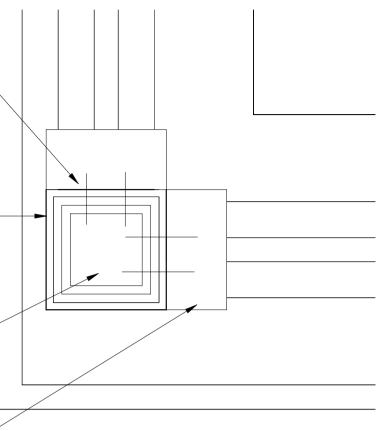
ON 3-5/8" 25 GAUGE

METAL STUD FRAMING

STOREFRONT FRAME MECHANICALLY ATTACHED TO HSS POST	
ALUMINUM BRAKE METAL COLUMN COVER (TO MATCH FINISH OF ADJACENT ALUMINUM STOREFRONT)	
HSS 4x4x1/4. SEE STRUCTURAL	
	/

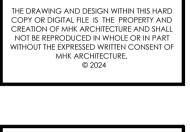






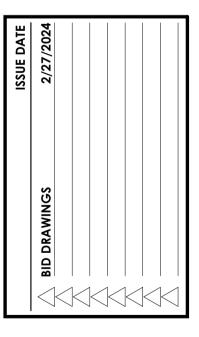
STOREFRONT - POST CONNECTION DETAIL SCALE: 3" = 1'-0"

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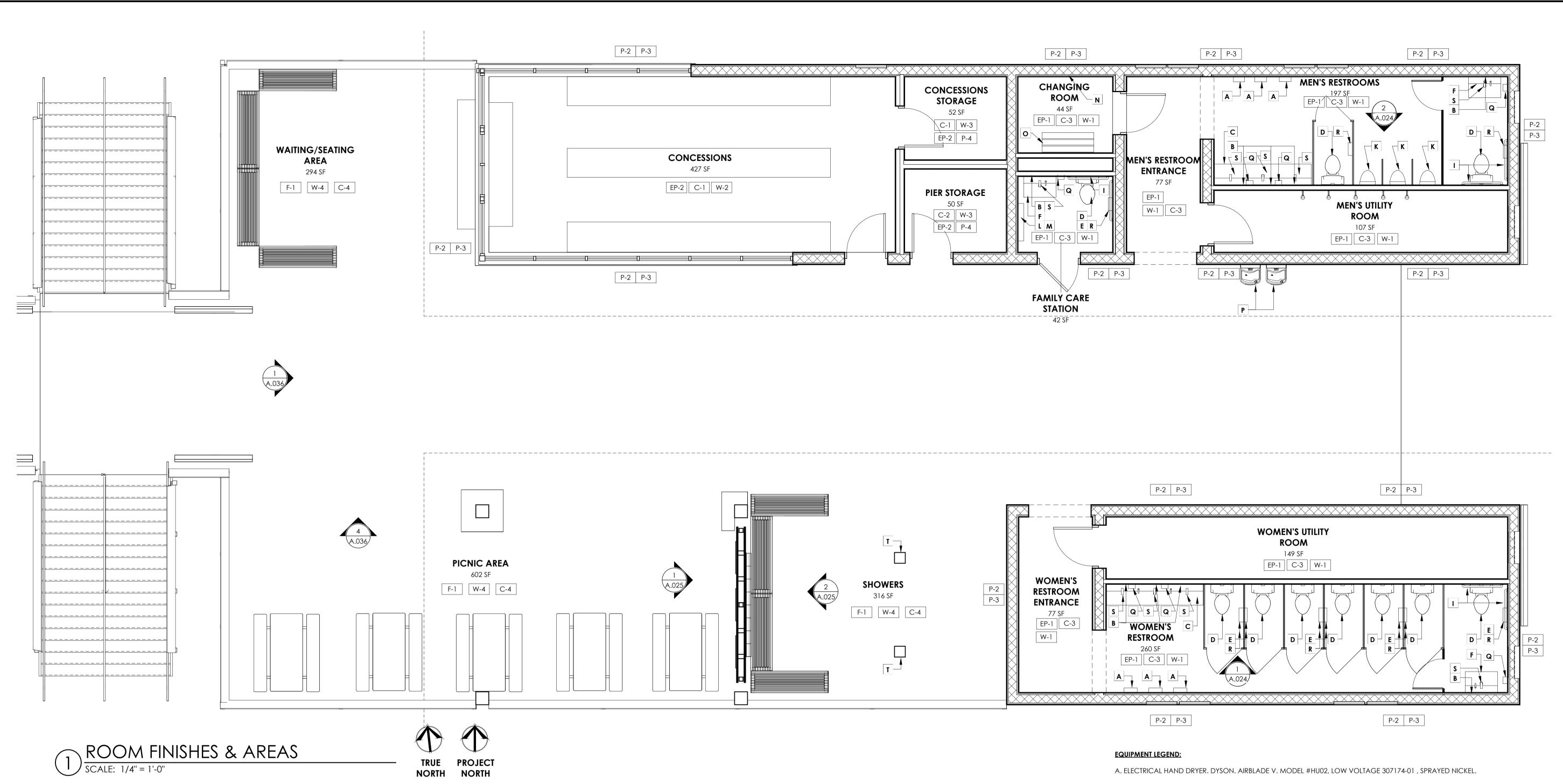
CTION . 34102 ECONSTRU(Naples FL Ľ RE(S., | PIER Ave APLES 12th 25 1

FLORIDA SEAL REG# AR 16971



WINDOW DETAILS

PHASE	CD
PR NO	23118
A.C)22B



FINISH SPECIFICATIONS		P-2	EXTERIOR HARDIE ARTISAN SIDING	W-2	PAPERLESS DRYWALL WITH FIBERGLASS REINFORCED PLASTIC MARLITE SYMMETRIC SMART SEAM SUBWAY HORIZONTAL 6"X3" OR RECTANGLE HORIZONTAL 6"X3". COLOR AS SELECTED BY ARCHITECT FROM CLASSIC COLORS		
TAG	SPECIFICATION	NOTES		FINISH: LATEX - EGGSHELL			AND SHERWIN -WILLIAMS COLOR TRENDS
EP-1	DUR-A-FLEX HYBRI-FLEX MC. COLOR TO BE SELECTED BY ARCHITECT FROM ANY OF	FLOOR	P-3	PAINT: MANUFACTURER: SHERWIN-WILLIAMS COLOR: TO MATCH EXISTING FINISH: LATEX - SEMIGLOSS	EXTERIOR TRIM	- W-3	PAPERLESS DRYWALL, PAINTED
	MACRO-CHIP, MICRO-CHIP, EARTHSTONE, CLAYSTONE DESIGNER FINISHES.				W-4	IPE-CLAD COLUMNS. NATURAL WEATHER	
	BASE BID: INSTALL OVER EXISTING CONCRETE SLAB (AFTER REMOVAL OF EXISTING EP OXY FLOORING)		P-4	PAINT: MANUFACTURER: SHERWIN-WILLIAMS COLOR: AS SELECTED BY ARCHITECT FINISH: EGGSHELL	GENERAL INTERIOR WALL	F-1	IPE DECKING NATURAL WEATHER
	ALTERNATE BID: INSTALL OVER EXISTING EPOXY FLOORING		_			C-1	ARMSTRONG, CLEAN ROOM VL#868, UNPERFORATED, WHITE, 2'X2'. WITH 15/16''
EP-2	DUR-A-FLEX HYBRI-FLEX MC. COLOR TO BE SELECTED BY ARCHITECT FROM ANY OF	FLOOR AND 6" COVE BASE	W-1	 DUR-A-FLEX DUR-A-WALL VC. WAINSCOT TO EXISTING IPE. COLOR TO BE SELECTED BY ARCHITECT FROM ANY OF MACRO- CHIP AND MICRO-CHIP FINISHES. BASE BID: INSTALL OVER EXISTING CMU BLOCK AFTER REMOVAL OF EXISTING EPOXY WALL FINISH AND RELATED MOUNTING MATERIALS. SKIM COAT BLOCK SMOOTH. 	E SELECTED EXISTING IPE TO BE REFINISHED MACRO- HES. ING CMU XISTING ATED COAT		SUSPENSION SYSTEM
	MACRO-CHIP, MICRO-CHIP, EARTHSTONE, CLAYSTONE DESIGNER FINISHES.					C-2	GYPSUM BOARD, PAINTED WITH SHERWIN-WILLIAMS, COLOR: AS SELECTED BY ARCHITECT FINISH: LATEX - EGGSHELL
	BASE BID: INSTALL OVER EXISTING CONCRETE SLAB (AFTER REMOVAL OF EXISTING EP OXY FLOORING)					C-3	EXISTING IPE TONGUE AND GROOVE CEILING, TO BE RESTAINED.
	ALTERNATE BID: INSTALL OVER EXISTING EPOXY FLOORING					C-4	TRUSSES (HEAVY TIMBER), RAFTERS, TONGUE AND GROOVE ROOF DECK. NATURAL WEATHER ALL IPE.
P-1	PAINT: MANUFACTURER: SHERWIN-WILLIAMS COLOR: AS SELECTED BY ARCHITECT FINISH: LATEX - EGGSHELL	CEILING		ALTERNATE BID: INSTALL OVER EXISTING EPOXY WALL FINISH.			

C. THREE STATION LAVATORY. BRADLEY VERGE. MODEL # LVLD3 / L SINGLE TEMPERED LINE ASSEMBLY / ANTARTICA / STAIN / S-

POLY

D. TOILET. AMERICAN STANDARD. MODEL #3353.001 AFWALL MILLENIUM FLOWISE 1.1 GPF ELONGATED FLUSHOMETER TOILET SYSTEM WITH EVERCLEAN, AC POWER #6067.262.002 (BACK SPUD) WHITE, WITH HEAVY DUTY OPEN FRONT ELONGATED COVER SEAT WITH EVERCLEAN SURFACE, MODEL # 59011101.020

E. SANITARY PRODUCT DISPOSAL UNIT MODEL 4A10-11 SURFACE MOUNTED BRADEX - DIPLOMAT SERIES - STAINLESS STEEL WITH HEAVY DUTY PIANO HINGE.

F. LAVATORY, BRADLEY. MODEL #LVLD1 / IR-DCD-PT / 6315-KT0000-P19-231F / TMA / ANTARTICA / STAIN / S-POLY

G. <u>NOT USED</u>

H. <u>Not used</u>

J. <u>NOT USED</u>

- ARCHITECT.
- STAINLESS.

B. FRAMELESS MIRROR. BOBRICK. B-1556 2436

I. GRAB BAR. BOBRICK. MODEL #B-6897.99 TWO- WALL TOILET COMPARTMENT GRAB BAR PEENED.

K. URINAL. AMERICAN STANDARD. MODEL #6042.001EC.020 DECORUM .125 GPF/0.47 LPF HIGH EFFICIENCY TOP SPUD URINAL WITH EVERCLEAN, WHITE, WITH SELECTRONIC DC TOP SPUD FLUSH VALVE 6063.013.002

L. BABY CHANGING STATION. KOALA KARE. MODEL #KB300-SS, COLOR: 01 GREY

M. CHILD PROTECTION SEAT. KOALA KARE. MODEL # KB102, COLOR 01 GREY.

N. HEAVY DUTY CLOTHES HOOK WITH CONCEALED MOUNTING, BOBRICK, MODEL # B-2116 (5 TOTAL)

O. BENCH. BRADLEY. LENOXPEDESTAL 72-0120 BLACK STD - LENOX LOCKER PEDESTAL BENCH, 12 W x 72". COLOR AS SELECTED BY

P. ELKAY EZH2O BOTTLEFILLING STATION & BI-LEVEL HIGH EFFICIENCY VANDAL-RESISTANT COOLER FILTERED REFRIGERATED

Q. GOJO 2730-12 TFX 1200 ML BLACK TOUCHLESS HAND SOAP DISPENSER. (EXISTING TO REMAIN)

R. TWIN TISSUE DISPENSER PLASTIC - BLACK - SURFACE MOUNTED (EXISTING TO REMAIN)

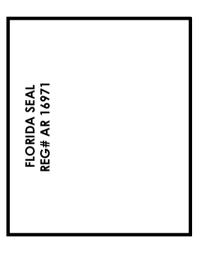
S. DELTA DEMD-301LF - ELECTRONIC FAUCET FOR COLD OR PREMIXED WATER

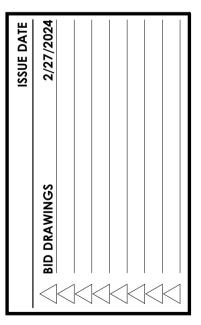
T. EXISTING SHOWERS TO BE REMOVED AND REINSTALLED FOR REUSE



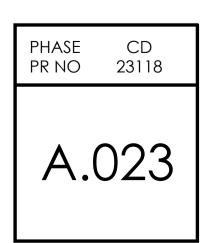




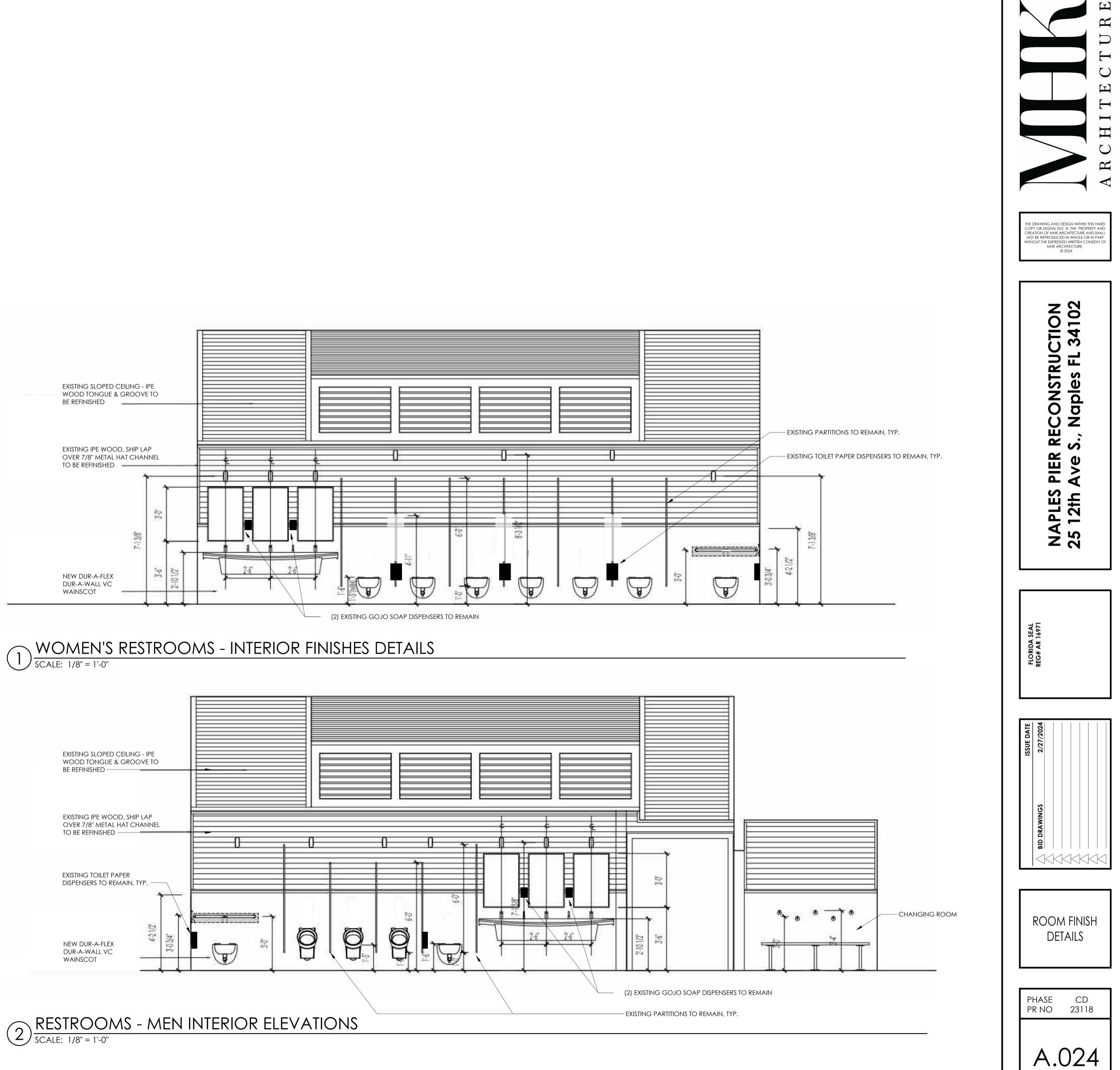


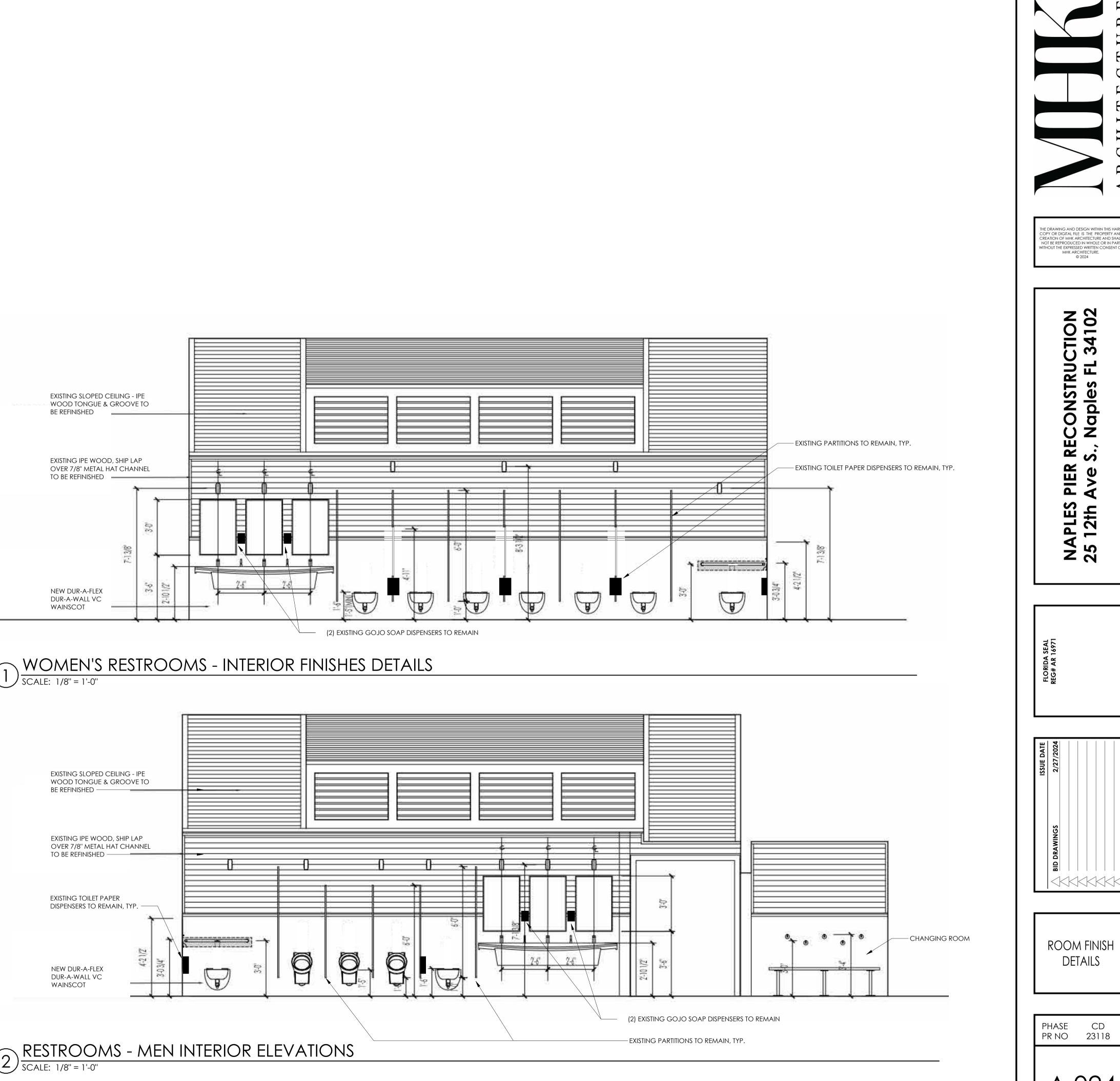


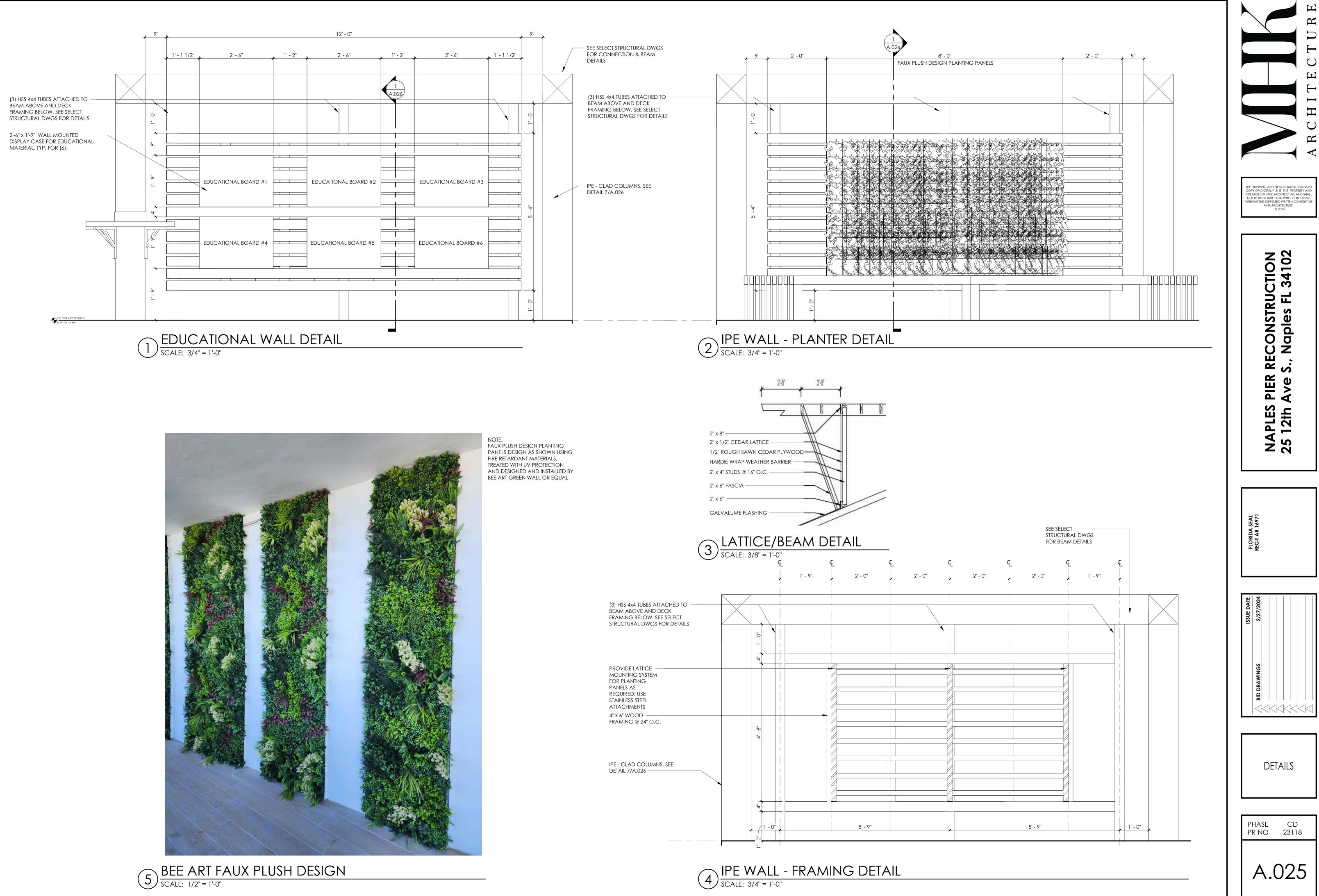


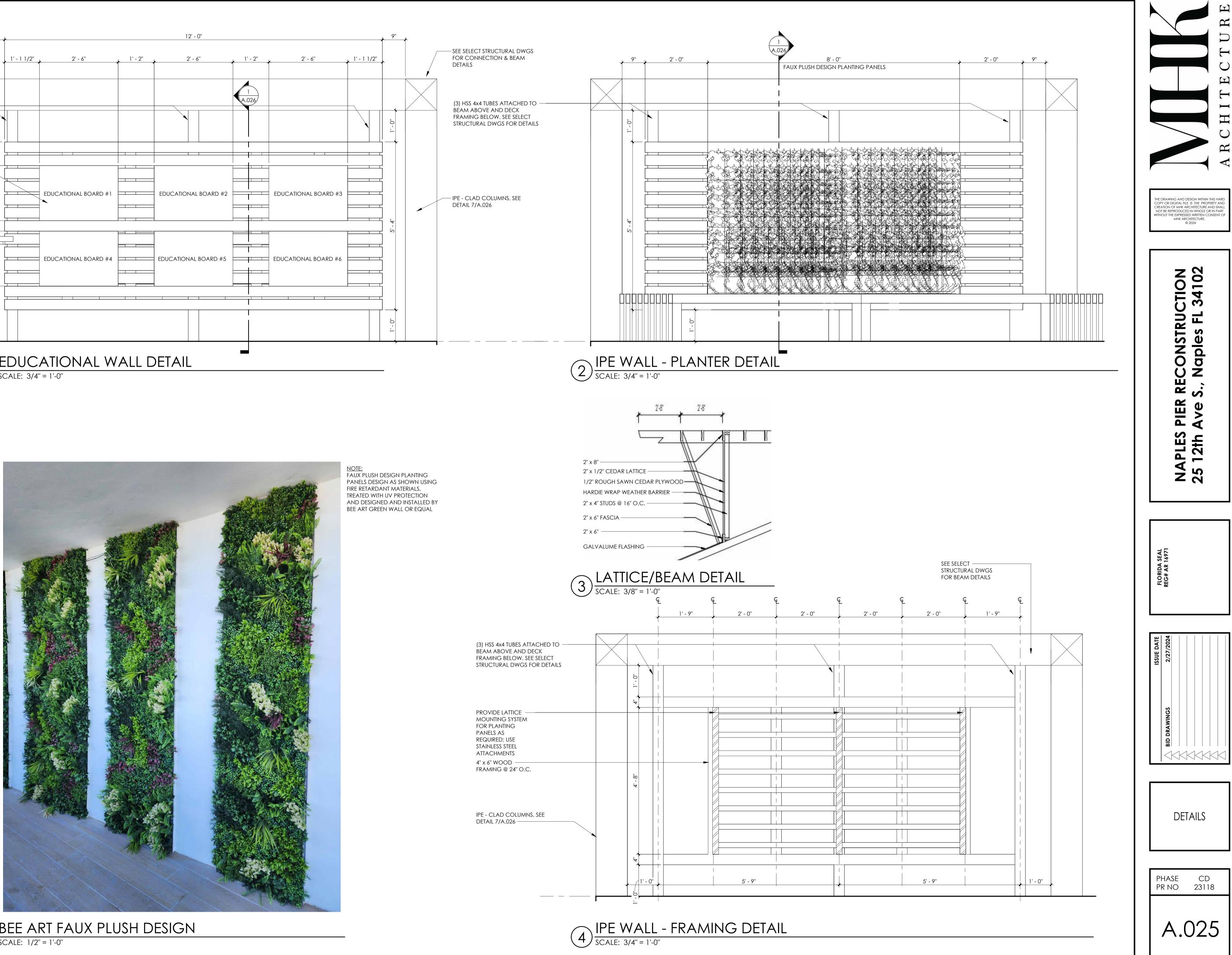




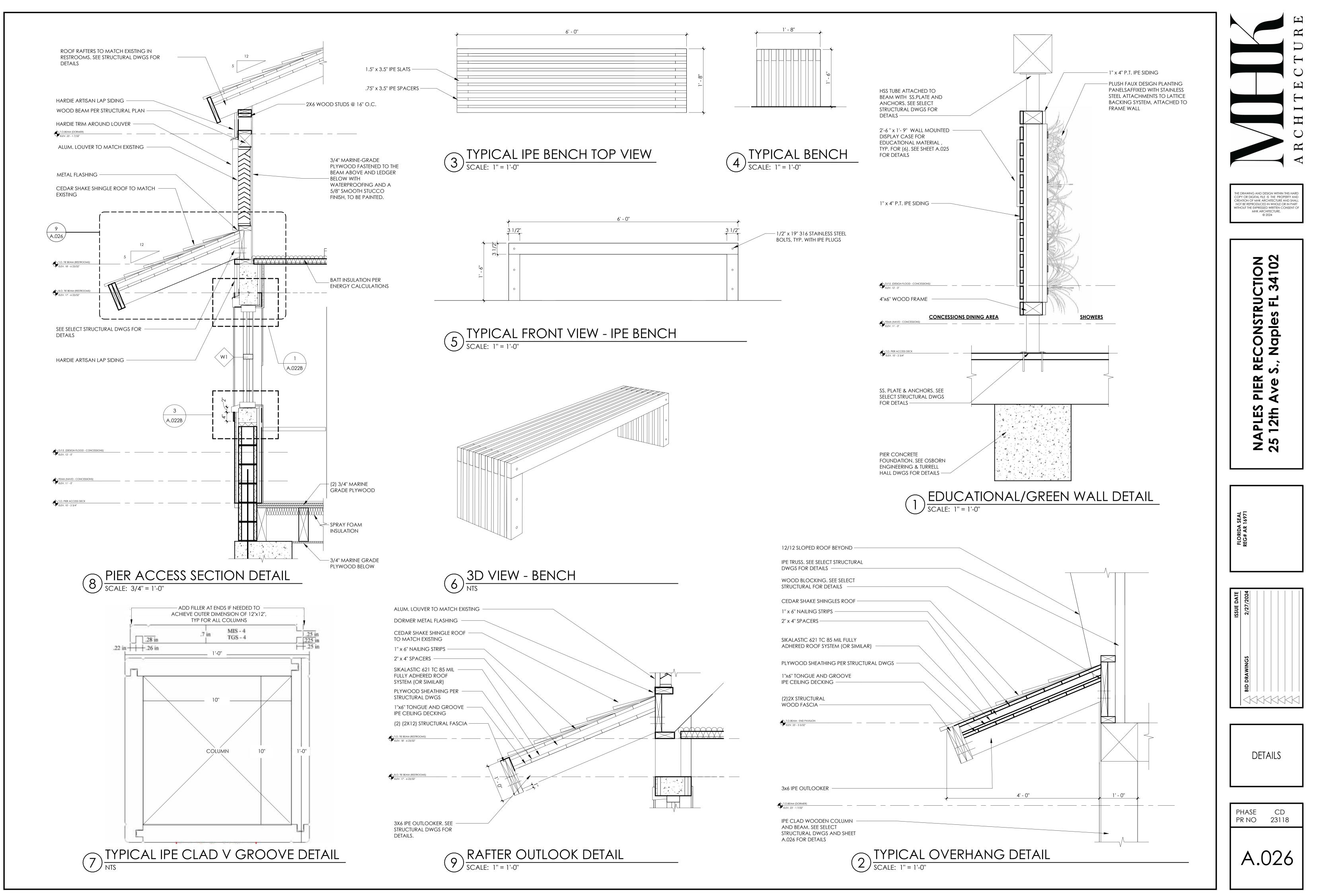




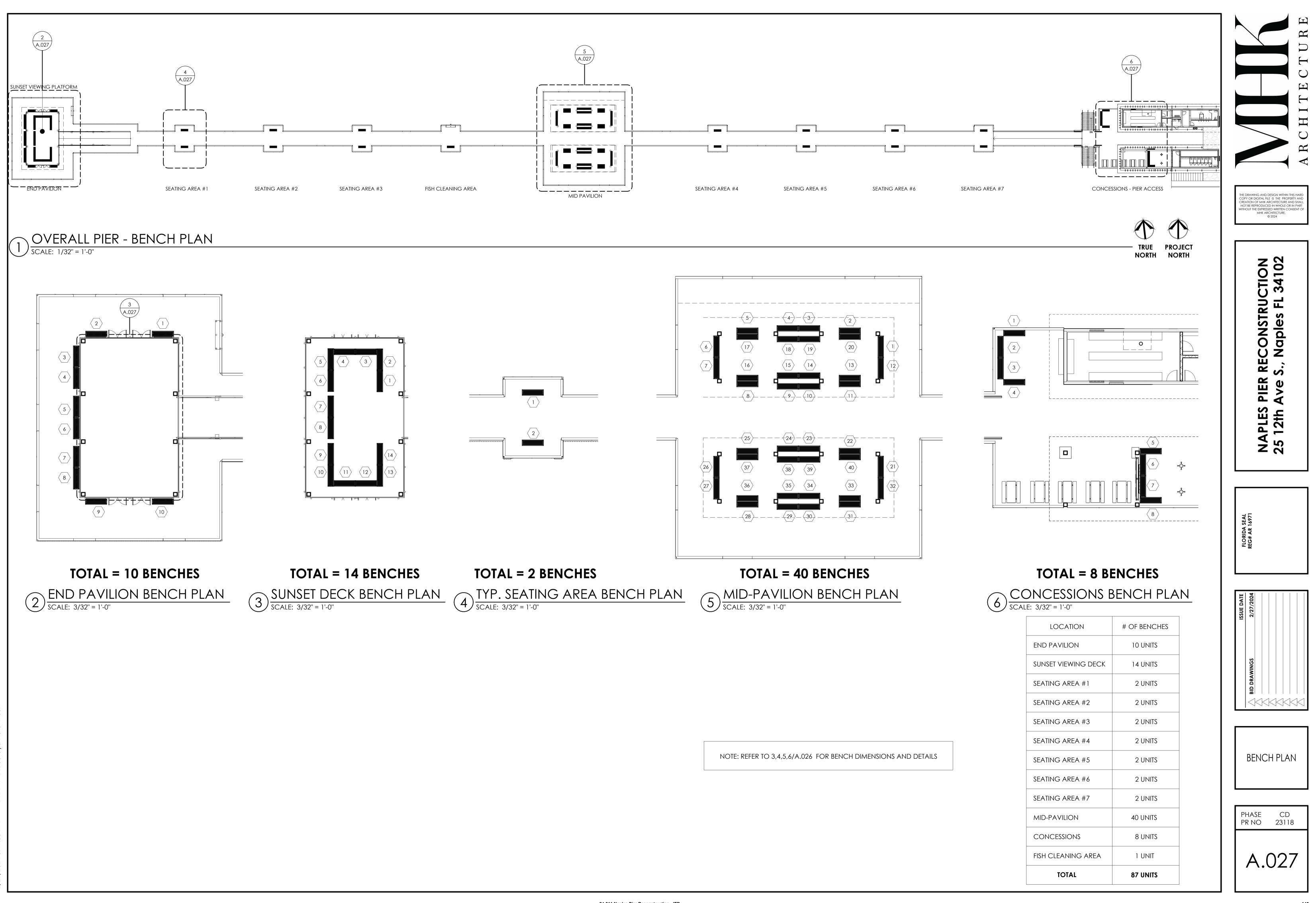






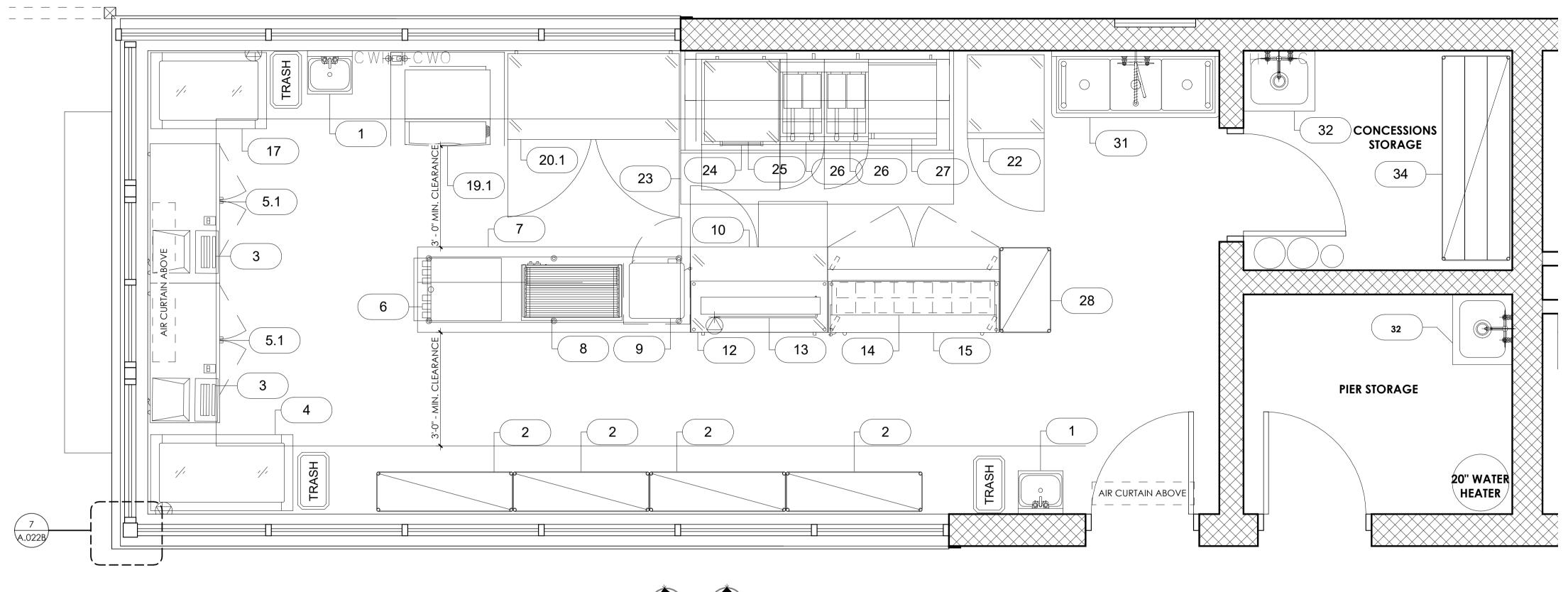


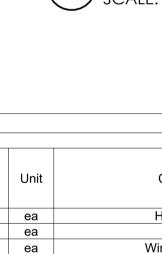
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City of Naples







								E	EQUIPN	JENT S																	
										Ε	ELECTRIC	CAL								PLUM	BING						
ItemNo	Quantity	Unit	Category	Mfr	Model	StockModel	Voltage	Phase	Amps	Cycle	Нр	Kw C	Connection Type	NEMA	Electrical Connection Height	Cold Water (in)	Cold Water Conn. Height (in)	Hot Water (in)	Hot Water Conn. Height (in)	Indirect Waste Size	Direct Waste Size	Direct Waste Conn. Height(in)	Gas Size(in)	Gas Conn. Height (in)	Gas MBTU	Special	Equipment Remarks
1	2	ea	Hand Sink	Krowne	HS-26L											1/2"		1/2"			1-1/2"						
	2	ea		Krowne	H-100																1-1/2"						
2	12	ea	Wire Shelving	John Boos	EPS-1448-G-X																						
3	2	ea	POS System	Custom	POS																					В	NOT IN BID - BY CONCESSIONER
4	1	ea	Chest Freezer	Atosa USA, Inc.	MMF9113		115	1	1.6	60		С	Cord & Plug	5-15P													NOT IN BID - BY CONCESSIONER
5.1	2	ea	Back Bar Cabinet, Refrigerated	True Mfg General Foodservice	TBB-24-48G-HC-LD		115	1	2.1	60	1/5	С	Cord & Plug	5-15P													NOT IN BID - BY CONCESSIONER
6	1	ea	Soda Ice & Beverage Dispenser	Cornelius	621053405		115	1	3.0	60																	NOT IN BID - BY CONCESSIONER
	1	ea		Cornelius	E400397		115	1	6.5	60	1/3																
7	1	ea	Work Table, Stainless Steel Top	Advance Tabco	SLAG-308-X																						
8	1	ea	Hot Dog Grill	APW Wyott	HR-50		120	1	10.8	60		1.32 C	Cord & Plug	5-15P												в	NOT IN BID - BY CONCESSIONER
9	1	ea	Display Case, Hot Food, Countertop	Hatco	FDWD-1-120-QS		120	1	11.6	60		1.39 C	Cord & Plug													1	NOT IN BID - BY CONCESSIONER
10	1	ea	Undercounter Refrigerator	True Mfg General Foodservice	TUC-48D-2-HC		115	1	3	60	1/5	С	Cord & Plug	5-15P													NOT IN BID - BY CONCESSIONER
11			Spare Number																							SpareNo	
12	1	ea	Overshelf	John Boos	OS-ED-1848-X																					· · · · · · · · · · · · · · · · · · ·	
13	1	ea	Heat Lamp	Hatco	GRAH-42-120-T-QS		120	1		60		.95														1	NOT IN BID - BY CONCESSIONER
14	1	ea	Sandwich / Salad Preparation Refrigerator	True Mfg General Foodservice	TSSU-60-16-HC		115	1	6.5	60	1/3	С	Cord & Plug	5-15P												1	NOT IN BID - BY CONCESSIONER
15	1	ea	Overshelf	John Boos	OS-ED-1860-X																						
16			Spare Number																						:	SpareNo	
17	1	ea	Chest Freezer	Atosa USA, Inc.	MMF9110		115	1	1.6	60		С	Cord & Plug	5-15P												1	NOT IN BID - BY CONCESSIONER
18			Spare Number																						:	SpareNo	
19.1	1	ea	Ice Maker with Bin, Cube-Style	Manitowoc	UDF0310A		115	1	10	60	3/4			5-15P		3/8"				1/2"						1	NOT IN BID - BY CONCESSIONER
20.1	1	ea	Undercounter Refrigerator	True Mfg General Foodservice	TUC-60-HC		115	1	4	60	1/4	С	Cord & Plug	5-15P													NOT IN BID - BY CONCESSIONER
21			Spare Number																							SpareNo	
22	1	ea	Reach-In Freezer	True Mfg General Foodservice	TS-23F-HC		115	1	3.7	60	1/2	С	Cord & Plug	5-15P													NOT IN BID - BY CONCESSIONER
23			SEE MECH./ELECT./PLUMB. HOOD DWGS.																								
24	1	ea	Pizza Bake Oven, Countertop, Electric	Bakers Pride	P44S		208	1	34.6	60		С	Cord & Plug	6-50P												· · · · ·	NOT IN BID - BY CONCESSIONER
25	1	ea	Undercounter Refrigerator	True Mfg General Foodservice	TUC-27D-2-HC		115	1	2	60	1/6		Cord & Plug													N	NOT IN BID - BY CONCESSIONER
26	2	ea	Electric Floor Fryer	Imperial	IFS-40-E							14.0														N	NOT IN BID - BY CONCESSIONER
	2		,	Imperial			208	1	68	60		14															
27	1	ea	Griddle, Electric, Countertop	Imperial	ITG-24-E		208	3	29.0	60		8.0															NOT IN BID - BY CONCESSIONER
28	5	ea	Wire Shelving	John Boos	EPS-1830-G-X			_																			
29			Spare Number																							SpareNo	
30			Spare Number																							SpareNo	
31	1	ea	Three (3) Compartment Sink	John Boos	3B184-X																						
	1	ea		John Boos	3B184-X	+ +																					
	1	ea		John Boos	3B184-X																						
	1	ea		Krowne	18-708L											1/2"		1/2"									
32	2	ea	Mop Sink	Krowne	MS-2424																2"						
	1	ea		Krowne	16-127											1/2"		1/2"									
		_]
34	5	ea	Wire Shelving	John Boos	EPS-2472-G-X																						

KITCHEN EQUIPMENT SCHEDULE NTS

1) CONCESSIONS - KITCHEN LAYOUT SCALE: 1/2" = 1'-0"

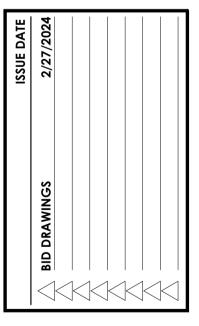




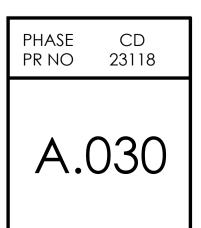


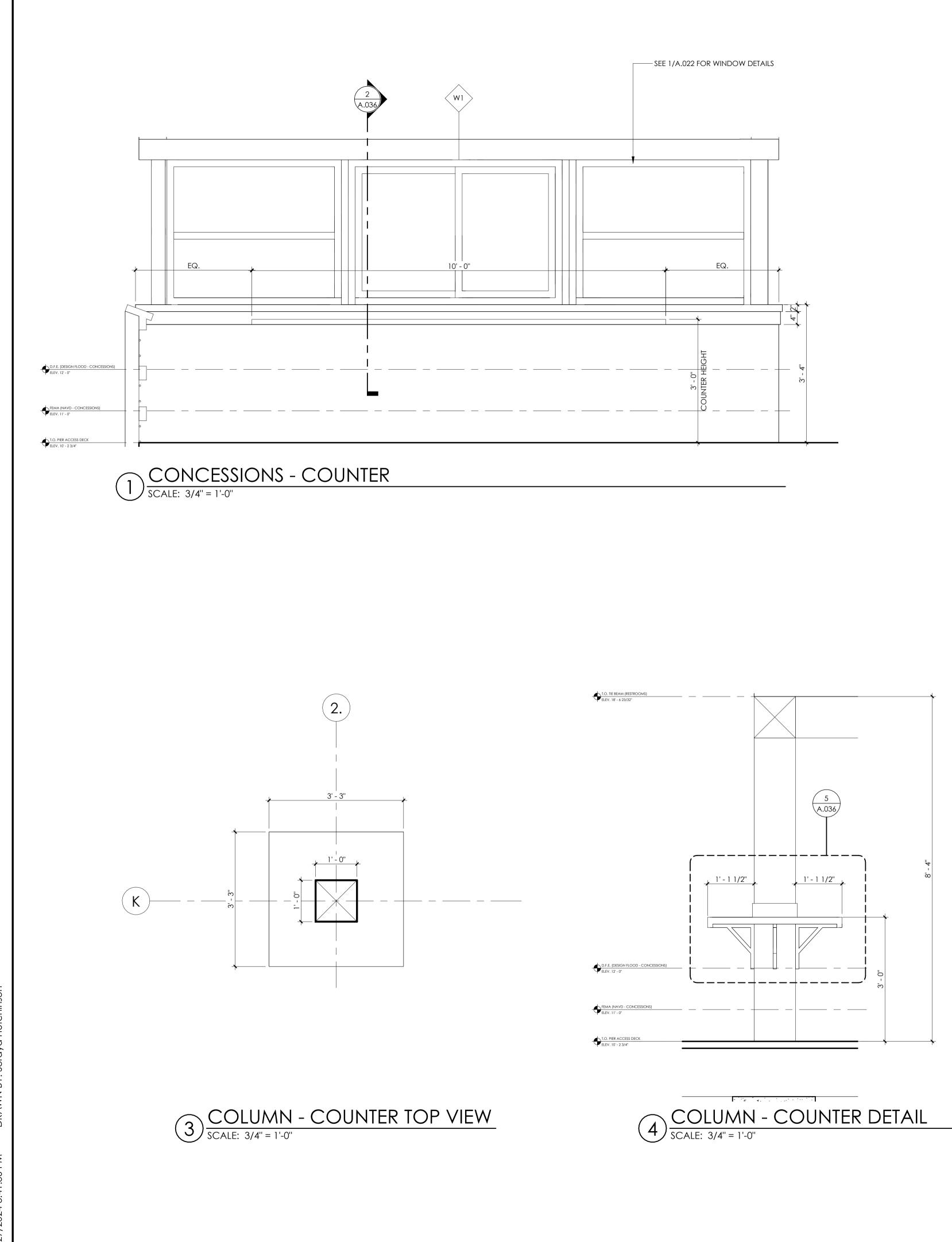


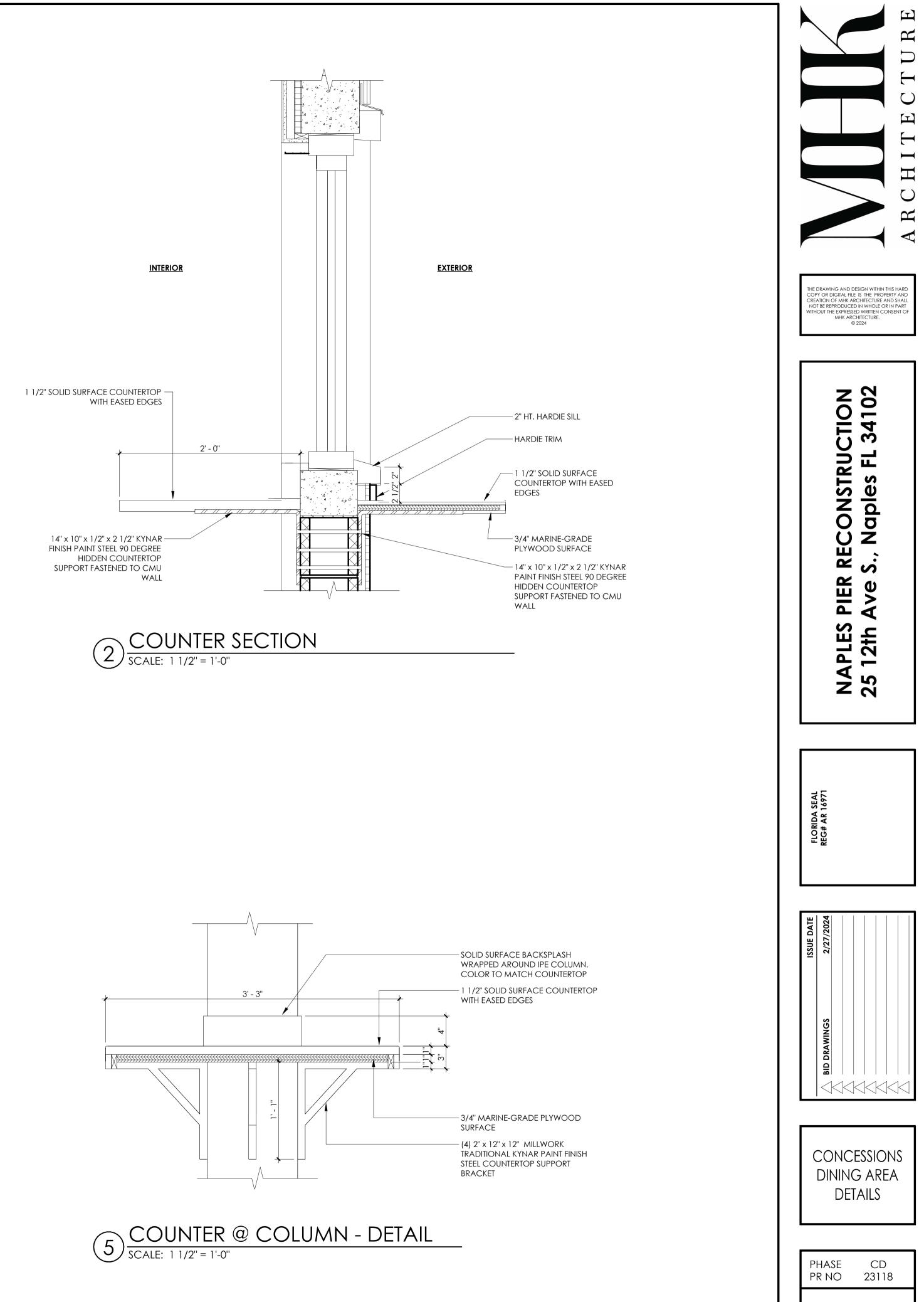


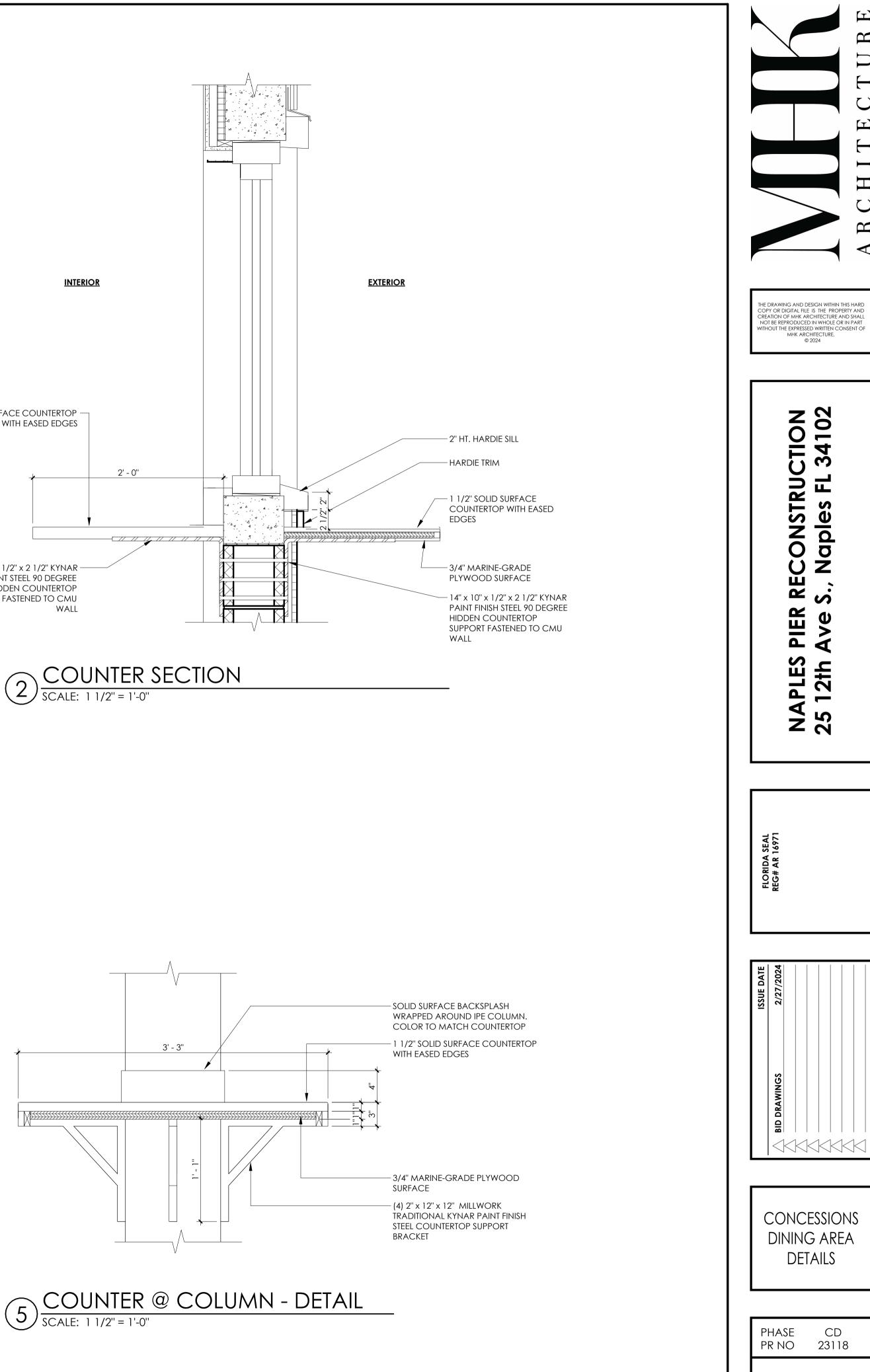








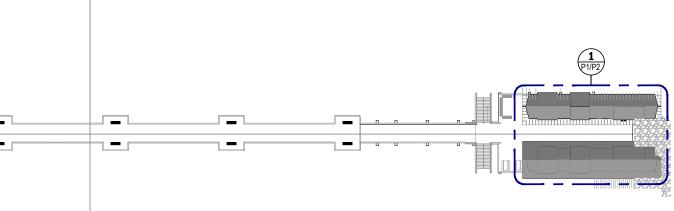




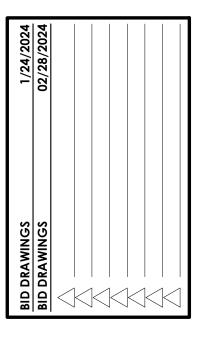
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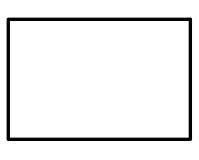
	UMBING NOTES & SPECIFICATIONS		G SYMBOL LEGE
. <u>GE</u> 1.1.	IERAL THE PLUMBING PLAN SHALL COMPLY WITH INDICATED BUILDING, ENERGY CODE, AND ALL OTHER LOCALLY ADOPTED STANDARDS OR	DWV PIPING S	YSTEM
1.2.	AMENDMENTS. THESE DRAWINGS WILL NOT BE UPDATED FOR FIELD CHANGES NOT PREVIOUSLY DISCUSSED WITH ENGINEER AND LETTERS TO	SAN	
	PASS INSPECTION AS A RESULT OF SUCH DEVIATIONS WILL NOT BE PROVIDED. THESE DRAWINGS REPRESENT THE ENGINEER'S INTERPRETATION OF THE APPLICABLE CODES, HAVE BEEN REVIEWED BY THE LOCAL AHJ FOR CODE CONFORMANCE, AND ARE CONSIDERED CONTRACT DOCUMENTS.	V	Sanitary Piping , existing Vent Piping
1.3.	THESE DRAWINGS ARE INTENDED TO INDICATE CAPACITY, SIZE, LOCATION, DIRECTION AND GENERAL ARRANGEMENT, BUT NOT EXACT DETAILS OF CONSTRUCTION. THE FACT THAT ONLY CERTAIN FEATURES OF THE INSTALLATION ARE INDICATED MUST NOT BE TAKEN TO MEAN THAT OTHER SIMILAR OR DIFFERENT FEATURES WILL NOT BE REQUIRED.	GW	GREASE / WASTE PIPING
1.4.	THIS CONTRACTOR SHALL COORDINATE WITH THE OTHER CONTRACTORS TO INSURE THAT EACH TRADE SHALL HAVE SUFFICIENT SPACE TO INSTALL THEIR EQUIPMENT (DUCTWORK, PIPING, ELECTRICAL WORK, ETC.).	DOMESTIC WA	
1.5.	WORK SHALL INCLUDE ALL LABOR, MATERIALS, PERMITS AND OTHER COSTS AS ARE NECESSARY FOR THE INSTALLATION OF A		COLD WATER PIPING
1.6.	COMPLETE AND SATISFACTORY OPERATIONAL PLUMBING SYSTEM. ALL EQUIPMENT FIXTURES, ETC. SHALL BE TESTED, ADJUSTED AND OPERATED AS INDICATED ON THE PLANS AND PLACED IN	(E)CW	COLD WATER PIPING
	SATISFACTORY OPERATIONAL CONDITION BY THE PLUMBING CONTRACTOR. THIS CONTRACTOR SHALL GUARANTEE ALL WORKMANSHIP. MATERIALS AND EQUIPMENT TO BE FREE OF DEFECTS FOR A PERIOD OF ONE YEAR FROM DATE OF CERTIFICATE OF OCCUPANCY. THIS IS IN ADDITION TO ANY WARRANTY OR GUARANTEE FROM THE EQUIPMENT MANUFACTURER. FURNISH THE	HW	HOT WATER PIPING
1.7.	OWNER WITH THE MANUFACTURER'S WRITTEN CERTIFICATES. PLUMBING OR PIPING SYSTEMS INDICATED AS BEING UNDER "SEPARATE PERMIT" SHALL BE INTERPRETED AS A SEPARATE PERMIT PULLED BY THE PLUMBING CONTRACTOR WHICH INCLUDES DESIGN / PERMIT FEES, ENGINEERING FEES, UNLESS OTHERWISE		HOT WATER RE-CIRCULATION LI
4.0	DISCUSSED WITH THE GENERAL CONTRACTOR OR ENGINEER.	STORM PIPIN	
1.8.	UNLESS NOTED OTHERWISE, ALL MATERIALS SHALL BE NEW, COMPLETE, INCLUDE MANUFACTURER'S WARRANTY AND SHALL BE U.L. APPROVED IF APPLICABLE. ALL WORK SHALL PRESENT A NEAT MECHANICAL APPEARANCE WHEN COMPLETED.	ST	STORM PIPING (BELOW GRADE)
1.9. 1.10.	IN GENERAL, ALL PIPING SHALL BE RUN CONCEALED IN CEILING AND PIPE SPACES PROVIDED UNLESS NOTED OTHERWISE. VERIFY ALL DIMENSIONS FORM ARCHITECTURAL PLANS FOR FIELD DIMENSIONS. DO NOT SCALE CONSTRUCTION DOCUMENTS.	PRL	PRIMARY ROOF LEADER (ABOVE
1.11.	PROVIDE STOP VALVES OR ANGLE STOP VALVES ON EACH WATER CONNECTION TO EACH PLUMBING FIXTURE. PROVIDE UNIONS TO REMOVE, SERVICE, AND REPLACE PLUMBING EQUIPMENT.	SRL	SECONDARY ROOF LEADER (ABO
1.12.	BURIED PIPING NEAR FOUNDATIONS OR BEARING WALLS SHALL BE INSTALLED IN ACCORDANCE WITH THE PLUMBING CODE INSTRUCTIONS ON PROTECTION OF PIPES, AND SHALL BE SLEEVED WITH APPROVED MATERIALS.	GAS PIPING	
1.13.	PLUMBING SYSTEM INSTALLER SHALL PROVIDE ALL STRUCTURAL MEMBERS, SUPPORT BRACKETS, FLASHING, HARDWARE, ETC.,	G	GAS PIPING, NATURAL GAS OR L
1.14.	REQUIRED TO INSTALL A COMPLETE SYSTEM. THESE DRAWINGS ARE DIAGRAMTIC. ALL RISES, DROPS, OR OFFSETS IN PIPING NOT NECESSARILY SHOWN. ALL UNDERGROUND	NG	gas Piping, natural gas gas Piping, lp gas
1.15.	PIPING SHALL BE INSTALLED WITHIN 1'-0" INCHES (MAX).		
1.15.	SWITCH GEAR REQUIRED BY ARTICLE 110 OF THE NEC. THIS INCLUDES INSTALLATIONS WITH A DROPPED (LAY-IN) OR DRYWALL CEILING. COORDINATION WITH ELECTRICAL CONTRACTOR REQUIRED.	O	PIPE RISE, INLINE
. <u>SU</u> 2.1.	BMITTALS AND SHOP DRAWINGS SUBMITTALS OR SHOP DRAWINGS SHALL BE PROVIDED TO THE GENERAL CONTRACTOR AND ENGINEER FOR REVIEW. THESE	C	PIPE DROP, INLINE
	SUBMITTALS OR SHOP DRAWINGS SHALL INCLUDE ALL EQUIPMENT, MATERIALS, FIXTURES, APPLIANCES, PIPING MATERIALS, ETC. THE SHOP DRAWINGS WILL BE REVIEWED BY THE ENGINEER ON BEHALF OF THE OWNER AND/OR CLIENT, AND APPROVAL OF SHOP DRAWINGS SHALL <u>NOT RELIEVE THE CONTRACTOR OF COMPLIANCE WITH THESE DRAWINGS</u> .		PIPE RISE, INLINE
2.2.	THE SHOP DRAWINGS SHALL BE HIGHLIGHTED OR MARKED WITH CONSPICUOUS AND OBVIOUS NOTATIONS IDENTIFYING THE SPECIFIC EQUIPMENT, MATERIALS, FIXTURES, APPLIANCES, PIPING MATERIALS, ETC PROPOSED TO BE USED. SHOP DRAWINGS	→ ↓	RISER DROP
	SUBMITTED TO ENGINEER THAT INCLUDE NON APPLICABLE INFORMATION, OR WHICH DO NOT INCLUDE SPECIFIC NOTATIONS AND/OR HIGHLIGHTING WILL NOT BE REVIEWED.	 	PIPE BOTTOM CONNECTION, 45° TOP CONNECTION, 45 OR 90 DEC
. <u>UT</u> 3.1.	LITY CONNECTIONS CONTRACTOR SHALL VERIFY ELEVATIONS OF UTILITY CONNECTIONS ON SITE PRIOR TO COMMENCING WORK. THIS SHALL INCLUDE		SIDE CONNECTION, TEE
3.2.	FIELD MEASURING EXISTING INVERT ELEVATIONS TO ENSURE AN SUFFICIENT PIPING DEPTH FOR GRAVITY SYSTEMS PLUMBING CONTRACTOR RESPONSIBILITY TO BE TO 5' BEYOND BUILDING LINE FINAL CONNECTION TO SITE UTILITIES TO BE	<u>_</u>	DWV WYE AND 1/8 BEND
	PLUMBER'S RESPONSIBILITY.		SANITARY WYE + 1/8 BEND
. <u>DO</u> 4.1.	INSULATE ALL DOMESTIC HOT WATER LINES IN ACCORDANCE WITH THE FLORIDA ENERGY CODE (3/4" ARMAFLEX RUBBER INSULATION MINIMUM). FINAL INSULATION THICKNESS TO BE IN ACCORDANCE WITH SYSTEM TYPE AND TEMPERATURE.	·}	CAPPED OUTLET
4.2.	PROVIDE MAIN SHUTOFF VALVE, RUBBER FACED CHECK VALVE, VACUUM, BREAKER AND HOSE BIB ON COLD WATER MAIN ENTERING THE BUILDING. PROVIDE SHUTOFF VALVE ON THE WATER SUPPLY PIPE TO EVERY WATER HEATER.	PIPING SYS	STEM ACCESSOR
4.3.	SILLCOCKS, HOSE BIBS, AND OTHER OPENINGS WITH A HOSE CONNECTION SHALL BE PROTECTED BY AN ATMOSPHERIC-TYPE VACUUM BREAKER OR PERMANENTLY ATTACHED HOSE CONNECTION VACUUM BREAKER.		
4.4.	ALL REFRIGERATOR OR ICE MAKER LOCATIONS TO BE PROVIDED WITH A MINIMUM 1/2" C.W. LINE TO 1/4" PETCOCK 6" ABOVE FLOOR.		FLOOR DRAIN, ROUND
4.5.	PROVIDE WITH ICE MAKER BOX WITH 1/4 TURN VALVE AND HAMMER ARRESTOR VALVE. AN AIR CHAMBER/SHOCK ABSORBER WATER HAMMER ARRESTOR SHALL BE INSTALLED WHERE QUICK-CLOSING VALVES ARE USED		FLOOR DRAIN, SQUARE
	TO PREVENT WATER HAMMER, SUCH AS ON WASHING MACHINES, ICE MAKERS, DISHWASHERS, AND DRINKING FOUNTAINS. THE ARRESTOR SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS, BE ACCESSIBLE, AND SHALL CONFORM TO ASSE 1010.		FLOOR SINK WITH GRATE
<u>DW</u> 5.1.	V, STORM , AND CONDENSATE SYSTEM PIPING PROVIDE CLEAN-OUTS AT THE BASE OF EACH STACK, AT EACH 90 DEGREE CHANGE IN HORIZONTAL DIRECTION, AND AT EACH EXIT		BACKWATER VALVE WITH ACCES
	FROM BUILDING. CLEANOUT COVERS TO BE PROVIDED WHERE INSTALLED IN FINISHED AREA OR CONCEALED BY DRYWALL. NOT ALL CLEANOUTS INDICATED ON DRAWINGS.	<u> </u>	PIPE UNION
5.2.	ALL PRIMARY ROOF DRAINS SHALL BE PROVIDED WITH A SECONDARY STORM DRAIN PIPING SYSTEM IN CASE OF PRIMARY DRAIN BLOCKAGE. THE SECONDARY STORM DRAIN SHALL DISCHARGE ABOVE GRADE IN A CONSPICUOUS LOCATION OR AS INDICATED. SECONDARY STORM DRAIN PIPING SHALL NOT BE COMBINED WITH PRIMARY STORM WATER SYSTEM AND MINIMUM SIZE SHALL BE		ECCENTRIC REDUCER
5.3.	EQUAL TO PRIMARY DRAIN PIPING SERVICE RESPECTIVE PORTION OF SYSTEM.		CONCENTRIC REDUCER
5.4.	ACCESSIBLE BACKWATER VALVE. ALL CONDENSATE PIPING SHALL BE SLOPED AT 1/8" MINIMUM, AND 1/4" MAXIMUM. CONDENSATE PIPING SHALL BE DISCHARGED INTO		HOSE BIB WITH VACUUM BREAK
J. 4 .	AN INDIRECT WASTE RECEPTOR VIA AIR GAP. CONDENSATE PIPING SYSTEMS DISCHARGING INTO VERTICAL STORM LEADER TO BE PROVIDED WITH AN INLINE BACK-WATER VALVE.	+>	WALL HYDRANT, ENCLOSED, WIT
5.5. 5.6.	ALL ABOVE GRADE CONDENSATE PIPING TO BE INSULATED WITH 3/4" (MINIMUM) ARMAFLEX RUBBER INSULATION. SANITARY PIPING 2" OR LESS IN DIAMETER TO BE SLOPED AT 1/4" PER LINEAR FOOT, 3" THRU 8" IN DIAMETER AT 1/8"	——————————————————————————————————————	BALL VALVE, ACCESSIBLE
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5.6. 5. <u>GA</u>	SANITARY PIPING 2" OR LESS IN DIAMETER TO BE SLOPED AT 1/4" PER LINEAR FOOT, 3" THRU 8" IN DIAMETER AT 1/8"		BALL VALVE, ACCESSIBLE GATE VALVE BALL VALVE, VERTICAL, ON RISE
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5.6. 6.1. 6.2. 6.3.	SANITARY PIPING 2" OR LESS IN DIAMETER TO BE SLOPED AT 1/4" PER LINEAR FOOT, 3" THRU 8" IN DIAMETER AT 1/8" SPIPING SYSTEMS AND EQUIPMENT THE GAS SYSTEM PIPING AND INSTALLATION SHALL BE IN ACCORDANCE WITH THE FUEL-GAS CODE, NFPA 37,54,50A,51,56,57,58,59A,96,715 - IN ADDITIONAL TO ANY OTHER APPLICABLE STANDARDS OR AMENDMENTS. DISTANCES INDICATED ON GAS PLAN ARE FOR SIZING PURPOSES ONLY. GAS PIPING SCOPE SHALL INCLUDE THE INSTALLATION OF GAS DISTRIBUTION SYSTEM, ALL REQUIRED SHUT-OFF & CONTROL VALVES, FIRST & SECOND STAGE REGULATORS, FINAL CONNECTIONS TO GAS EQUIPMENT. GAS PIPING SHALL BE STEEL OR WROUGHT-IRON PIPE AND SHALL BE AT LEAST OF STANDARD WEIGHT (SCHEDULE 40).		BALL VALVE, ACCESSIBLE GATE VALVE BALL VALVE, VERTICAL, ON RISE BACKFLOW PREVENTER, DOUBL PRESSURE REDUCING VALVE (PI
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5.6. <u>GA</u> 6.1. 6.2. 6.3. 6.4. 6.5. 6.5. 6.6. 6.7. 6.8. 6.9. <u>PLI</u>	SANITARY PIPING 2" OR LESS IN DIAMETER TO BE SLOPED AT 1/4" PER LINEAR FOOT, 3" THRU 8" IN DIAMETER AT 1/8" PIPING SYSTEMS AND EQUIPMENT THE GAS SYSTEM PIPING AND INSTALLATION SHALL BE IN ACCORDANCE WITH THE FUEL-GAS CODE, NFPA 37,54,50A,51,56,57,58,59A,96,715 - IN ADDITIONAL TO ANY OTHER APPLICABLE STANDARDS OR AMENDMENTS. DISTANCES INDICATED ON GAS PLAN ARE FOR SIZING PURPOSES ONLY. GAS PIPING SCOPE SHALL INCLUDE THE INSTALLATION OF GAS DISTRIBUTION SYSTEM, ALL REQUIRED SHUT-OFF & CONTROL VALVES, FIRST & SECOND STAGE REGULATORS, FINAL CONNECTIONS TO GAS EQUIPMENT. GAS PIPING SHALL BE STEEL OR WROUGHT-IRON PIPE AND SHALL BE AT LEAST OF STANDARD WEIGHT (SCHEDULE 40). GAS PIPING SHALL BE STEEL OR WROUGHT-IRON PIPE AND SHALL BE AT LEAST OF STANDARD WEIGHT (SCHEDULE 40). GAS PIPING SHALL BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE ASTM / ASME STANDARDS. ALL GAS PIPING SHALL BE FINISHED WITH A RUST INHIBITING PRIMER, COLOR CODED FINISH, AND PROVIDED WITH IDENTIFICATION LABELS. PROVIDE SEDIMENT TRAP AS CLOSE ASS POSSIBLE TO EACH GAS APPLIANCE IN ACCORDANCE WITH NFPA 54. A DRIP OR DIRT LEG SHALL BE PROVIDED AT ANY POINT IN THE SYSTEM ALL APPLIANCES CONNECTED TO GAS SYSTEM SHALL BE PROVIDED WITH A GAS PRESSURE REGULATOR IF REQUIRED BY MANUFACTURERS INSTRUCTIONS OR WHERE GAS DESIGN SYSTEM PRESSURE IS IN EXCESS OF 7"WC. ALL REGULATORS SHALL BE VENTED TO OUTDOORS UNLESS A LISTED AND APPROVED VENTLESS REGULATOR IS UTILIZED. FINAL CONNECTIONS FOR FLOOR MOUNTED GAS APPLIANCES SHALL BE PROVIDED WITH FLEXIBLE GAS PIPING CONNECTION, STRAIN RELIEF, AND PERMANENT CHAIN OR CABLE. THE GAS DESIGN SYSTEM PRESSURE IS IN EXCESS OF 7"WC. ALL REGULATORS SHALL BE OF SUFFICIENT LENGTH TO INSPECT, SERVICE, AND DISCONNECT APPLIANCE. WHERE GAS PIPING IS PASSING THROUGH AN OUTSIDE WALL, THE PIPING SHALL ALSO BE PROTECTED AGAINST CORROSION BY COATING OR WRAPPING WITH AN INERT MATERIAL. WHERE PIPING IS ENCASED IN A PROTECTIVE PIPE SLEEVE, THE ANNULAR SPACE		BALL VALVE, ACCESSIBLE GATE VALVE BALL VALVE, VERTICAL, ON RISE BACKFLOW PREVENTER, DOUBL PRESSURE REDUCING VALVE (PI TEMPERATURE GAUGE MANUAL AIR VENT (A) INDICATES FLOOR CLEANOUT, END OF LINE FLOOR CLEANOUT, INLINE, DUAL GRADE CLEANOUT, INLINE, DUAL DUAL GRADE CLEANOUT CHECK VALVE, LISTED FOR SYST INLINE PUMP, SHOWN WITH MOT INLINE PUMP WATER METER, UTILITY
5.6. <u>GA</u> 6.1. 6.2. 6.3. 6.4. 6.5. 6.6. 6.7. 6.8. 6.9.	SANITARY PIPING 2" OR LESS IN DIAMETER TO BE SLOPED AT 1/4" PER LINEAR FOOT, 3" THRU 8" IN DIAMETER AT 1/8" SPIPING SYSTEM PIPING AND INSTALLATION SHALL BE IN ACCORDANCE WITH THE FUEL-GAS CODE, NFPA 37,54,50a,51,56,57a,59,39a,715. IN ADDITIONAL TO ANY OTHER APPLICABLE STANDARDS OR AMENDMENTS. DISTANCES INDICATED ON GAS PLAN ARE FOR SIZING PURPOSES ONLY. GAS PIPING SCOPE SHALL INCLUDE THE INSTALLATION OF GAS DISTRIBUTION SYSTEM, ALL REQUIRED SHUT-OFF & CONTROL VALVES, FIRST & SECOND STAGE REGULATORS, FINAL CONNECTIONS TO GAS EQUIPMENT. GAS PIPING SHALL BE STEEL OR WROUGHT-IRON PIPE AND SHALL BE AT LEAST OF STANDARD WEIGHT (SCHEDULE 40). GAS PIPING SHALL BE STELL OR WROUGHT-IRON PIPE AND SHALL BE AT LEAST OF STANDARD. ALL GAS PIPING SHALL BE FINISHED WITH A RUST INHIBITING PRIMER, COLOR CODED FINISH, AND PROVIDED WITH IDENTIFICATION LABELS. PROVIDE SEDIMENT TRAP AS CLOSE ASS POSSIBLE TO EACH GAS APPLIANCE IN ACCORDANCE WITH NFPA 54. A DRIP OR DIRT LEG SHALL BE PROVIDED AT ANY POINT IN THE SYSTEM ALL APPLIANCES CONNECTED TO GAS SYSTEM SHALL BE PROVIDED WITH A GAS PRESSURE REGULATOR IF REQUIRED BY MANUFACTURERS INSTRUCTIONS OR WHERE GAS DESION SYSTEM PRESSURE IS IN EXCESS OF "TWC. ALL REGULATORS SHALL BE VENTED TO OUTDOORS UNLESS A LISTED AND APPROVED VENTLESS REGULATOR IS UTILIZED. FINAL CONNECTIONS FOR FLOOR MOUNTED GAS APPLIANCES SHALL BE PROVIDED WITH FLEXIBLE GAS PIPING CONNECTION, STRAIN RELIEF, AND PREMAMENT CHAIN OR CABLE. THE GAS FLEXIBLE GAS CONNECTION PIPING AND CHAIN/CABLING SHALL BE OF SUFFICIENT LENGTH TO INSPECT, SERVICE, AND DISCONNECT APPLIANCE. WHERE GAS PIPING SIPASSING THROUGH AN OUTSIDE WALL, THE PIPING SHALL ALSO BE PROTECTED AGAINST CORROSION BY COATING OR WRAPPING WITH AN INERT MATERIAL. WHERE PIPING IS ENCASED IN A PROTECTIVE PIPE SLEEVE, THE ANNULAR SPACE BETWEEN THE PIPING AND THE SLEEVE SHALL BE SEALED. NUM SPACES THEN OTHER PIPING AND THE SLEEVE SHALL BE AGALED. ALL MATERIALS, EQUIPMENT, OR PIPING SHALL BE APPROVED FOR PLENUM USE IF INSTALLED WITHIN RETURN AIR PLENUMS OR		BALL VALVE, ACCESSIBLE GATE VALVE BALL VALVE, VERTICAL, ON RISE BACKFLOW PREVENTER, DOUBL PRESSURE REDUCING VALVE (PI TEMPERATURE GAUGE MANUAL AIR VENT (A) INDICATES FLOOR CLEANOUT, END OF LINE FLOOR CLEANOUT, INLINE, DUAL GRADE CLEANOUT, INLINE, DUAL DUAL GRADE CLEANOUT CHECK VALVE, LISTED FOR SYST INLINE PUMP WATER METER, UTILITY WATER METER, PRIVATE, RADIO
5.6. G.1 6.2. 6.3. 6.4. 6.5. 6.6. 6.7. 6.8. 6.9. 7.1.	SANITARY PIPING 2° OR LESS IN DIAMETER TO BE SLOPED AT 1/4° PER LINEAR FOOT, 3° THRU 8° IN DIAMETER AT 1/8° SPIPING SYSTEMS AND EQUIPMENT THE GAS SYSTEM PIPING AND INSTALLATION SHALL BE IN ACCORDANCE WITH THE FUEL-GAS CODE, NFPA 37,54,506,31,657,58,598,398,398,3715. IN ADDITIONAL TO ANY OTHER APPLICABLE STANDARDS OR AMENDMENTS. DISTANCES INDICATED ON GAS PLAN ARE FOR SIZING PURPOSES ONLY. GAS PIPING SCOPE SHALL INCLUDE THE INSTALLATION OF GAS DISTRIBUTION SYSTEM, ALL REQUIRED SHUT-OFF & CONTROL VALVES, FIRST & SECOND STAGE REGULATORS, FINAL CONNECTIONS TO GAS EQUIPMENT. GAS PIPING SHALL BE STEEL OR WROUGHT-IRON PIPE AND SHALL BE AT LEAST OF STANDARD WEIGHT (SCHEDULE 40). GAS PIPING SHALL BE STEEL OR WROUGHT-IRON PIPE AND SHALL BE AT LEAST OF STANDARD WEIGHT (SCHEDULE 40). GAS PIPING SHALL BE FINISHED WITH A RUST INHIBITING PRIMER, COLOR CODED FINISH, AND PROVIDED WITH IDENTIFICATION LABELS. PROVIDE SEDIMENT TRAP AS CLOSE ASS POSSIBLE TO EACH GAS APPLIANCE IN ACCORDANCE WITH NFPA 54. A DRIP OR DIRT LEG SHALL BE PROVIDED AT ANY POINT IN THE SYSTEM ALL APPLIANCES CONNECTED TO GAS SYSTEM SHALL BE PROVIDED WITH A GAS PRESSURE REGULATOR IF REQUIRED BY MANUFACTURERS INSTRUCTIONS ON WHERE GAS DESIGN SYSTEM PRESSURE IS IN EXCESS OF 7WC. ALL REGULATORS SHALL BE VENTED TO OUTDOORS UNLESS A LISTED AND APPROVED VENTLESS REGULATOR IS UTILIZED. FINAL CONNECTIONS FOR FLOOR MOUNTED GAS APPLIANCES SHALL BE PROVIDED WITH FLEXIBE GAS PIPING CONNECTION, STRAIN RELIEF, AND PERMANENT CHAIN OR CABLE. THE GAS PLEXIBLE GAS CONNECTION IS UTILIZED. FINAL CONNECTIONS FOR FLOOR MOUNTED GAS APPLIANCES SHALL BE PROVIDED WITH FLEXIBE GAS PIPING CONNECTION, STRAIN RELIEF, AND PERMANENT CHAIN OR CABLE. THE GAS PLEXIBLE GAS CONNECTION IS UTILIZED. FINAL CONNECTIONS FOR FLOOR MOUNTED GAS APPLIANCES. WHERE GAS PIPING IS PASSING THROUGH AN OUTSIDE WALL, THE PIPING SHALL ALSO BE PROTECTED AGAINST CORROSION BY COATING OR WRAPPING WITH AN INERT MATERIAL. WHERE PIPING IS ENCASED IN A PROTECTIVE PIPE SLEEVE, THE ANNULAR SPACE BETWE		BALL VALVE, ACCESSIBLE GATE VALVE BALL VALVE, VERTICAL, ON RISE BACKFLOW PREVENTER, DOUBL PRESSURE REDUCING VALVE (PI TEMPERATURE GAUGE MANUAL AIR VENT (A) INDICATES FLOOR CLEANOUT, END OF LINE FLOOR CLEANOUT, INLINE, DUAL GRADE CLEANOUT, INLINE, DUAL DUAL GRADE CLEANOUT CHECK VALVE, LISTED FOR SYST INLINE PUMP WATER METER, UTILITY WATER METER, PRIVATE, RADIO
5.6. <u>GA</u> 6.1. 6.2. 6.3. 6.4. 6.5. 6.6. 6.7. 6.8. 6.9. 7.1. 7.2.	SANITARY PIPING 2" OR LESS IN DIAMETER TO BE SLOPED AT 1/4" PER LINEAR FOOT, 3" THRU 8" IN DIAMETER AT 1/8" SPIPING SYSTEM PIPING AND INSTALLATION SHALL BE IN ACCORDANCE WITH THE FUEL-GAS CODE, NFPA 37.54,50A 51,657,853,69A 57,91 (S) ADDITIONAL TO ANY OTHER APPLICABLE STANDARDS OR AMENDMENTS. DISTANCES INDICATED ON GAS PLAN ARE FOR SIZING PURPOSES ONLY. GAS PIPING SCOPE SHALL INCLUDE THE INSTALLATION OF GAS DISTRIBUTION SYSTEM, ALL REQUIRED SHUT-OFF & CONTROL VALVES, FIRST & SECOND STAGE REGULATORS, FINAL CONNECTIONS TO GAS EQUIPMENT. GAS PIPING SHALL BE STEEL OR WROUGHT-IRON PIPE AND SHALL BE AT LEAST OF STANDARD WEIGHT (SCHEDULE 40). GAS PIPING SHALL BE STEEL OR WROUGHT-IRON PIPE AND SHALL BE AT LEAST OF STANDARD WEIGHT (SCHEDULE 40). GAS PIPING SHALL BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE ASTM / ASME STANDARDS. ALL GAS PIPING SHALL BE FINISHED WITH A RUST INHIBITING PRIMER, COLOR CODED FINISH, AND PROVIDED WITH IDENTIFICATION LABELS. PROVIDES SEDIMENT TRAP AS CLOSE ASS POSSIBLE TO EACH GAS APPLIANCE IN ACCORDANCE WITH NFPA 54. A DRIP OR DIRT LEG SHALL BE PROVIDED AT ANY POINT IN THE SYSTEM ALL APPLIANCES CONNECTED TO GAS SYSTEM SHALL BE PROVIDED WITH A GAS PRESSURE REGULATOR IF REQUIRED BY MANUFACTURERS INSTRUCTIONS OR WHERE GAS DESIGN SYSTEM PRESSURE IS IN EXCESS OF 7"WC. ALL REQUIRED BY MANUFACTURERS INSTRUCTIONS OR WHERE GAS DESIGN SYSTEM PRESSURE IS IN EXCESS OF 7"WC. ALL REQUIRED BY MANUFACTURERS INSTRUCTIONS OR WHERE GAS PLIANCES SHALL BE PROVIDED WITH FLEXIBLE GAS PIPING CONNECTION, STRAIN RELIEF, AND DERMANENT CHAIN OR CABLE. THE GAS FLEXIBLE GAS CONNECTION PIPING AND CHAINCABLING SHALL BE OF SUFFICIENT LENGTH TO INSPECT, SERVICE, AND DISCONNECT APPLIANCE. WHERE GAS PIPING STANDARD CHAINCABLING SHALL BE OF SUFFICIENT LENGTH TO INSPECT, SERVICE, AND DISCONNECT APPLIANCE. WHERE GAS PIPING BY PASSING THROUGH AN OUTSIDE WALL, THE PIPING SHALL ALSO BE PROTECTED AGAINST CORROSION BY COATING OR WRAPPING WITH AN INERT MATERIAL. WHERE PIPING IS ENCASED IN A PROTECTIVE PIPE SLEEVE, THE ANNULAR SPACE BE		BALL VALVE, ACCESSIBLE GATE VALVE BALL VALVE, VERTICAL, ON RISE BACKFLOW PREVENTER, DOUBL PRESSURE REDUCING VALVE (PI TEMPERATURE GAUGE MANUAL AIR VENT (A) INDICATES FLOOR CLEANOUT, END OF LINE FLOOR CLEANOUT, INLINE, DUAL GRADE CLEANOUT, INLINE, DUAL DUAL GRADE CLEANOUT CHECK VALVE, LISTED FOR SYST INLINE PUMP WATER METER, UTILITY WATER METER, PRIVATE, RADIO

r	PLUMBING FIXTURE SCH	EDULE												
M	MARK DESCRIPTION	COMPONENTS		MANUFACTURER	BAS	SIS OF DESIGN TRIM & ACCESSORIES		DRAIN	CONNECT		OTHER	REMARKS		
FS	FS-8C BRONZE HALF-GRATE STRAINER AND DOME BOTTOM STRAINER		RED COMPONENTS AND ACCESSORIES FOR A INAL INSTALLATION	SIOUX CHIEF	861	CAST IRON BODY, DOME BOT	TOM STRAINER.	3"			F	PROVIDE WITH AS SEAL FOR ALL FL		D TRAP
((1) STAINLESS STEEL HAND SINK			REFER TO FOOD SERVICE DRAWINGS	SELECTED BY OWNER OR EQUIPMENT PROVIDER			2"	1-1/2" 1/2	2" 1/2"				
WO	WC-1M REFER TO ARCHITECTURAL DRAWINGS	PROVIDE WITH ALL REQUIR COMPLETE AND OPERATION	RED COMPONENTS AND ACCESSORIES FOR A NAL INSTALLATION	DRAWINGS	REFER TO ARCHITECTURAL DRAWINGS	REFER TO ARCHITECTURAL D	ORAWINGS	3"	2" 1/2		A	ADA COMPLIANT		
L10	L1C-MA REFER TO ARCHITECTURAL DRAWINGS	COMPLETE AND OPERATIO		REFER TO ARCHITECTURAL DRAWINGS REFER TO	REFER TO ARCHITECTURAL DRAWINGS REFER TO	REFER TO ARCHITECTURAL D	DRAWINGS		1-1/2" 1/2	2" 1/2"				
	L3C-MA REFER TO ARCHITECTURAL DRAWINGS	COMPLETE AND OPERATIO	RED COMPONENTS AND ACCESSORIES FOR A NAL INSTALLATION RED COMPONENTS AND ACCESSORIES FOR A	ARCHITECTURAL DRAWINGS REFER TO	ARCHITECTURAL DRAWINGS REFER TO	REFER TO ARCHITECTURAL D		EA.	1-1/2" 1/2" EA.	EA. 1/2" EA.				
	UR-1 REFER TO ARCHITECTURAL DRAWINGS	COMPLETE AND OPERATIO		ARCHITECTURAL DRAWINGS REFER TO FOOD	ARCHITECTURAL DRAWINGS SELECTED BY	REFER TO ARCHITECTURAL D	DRAWINGS	(3)	2" 1'	·		ADA COMPLIANT		SINK OR
	(31) 3-COMPARTMENT STAINLESS STEEL SINK (32) MOP SINK STAINLESS STEEL		RED COMPONENTS AND ACCESSORIES FOR A	SERVICE DRAWINGS MUSTEE	EQUIPMENT PROVIDER SELECTED BY EQUIPMENT	SELECTED BY EQUIPMENT PR	ROVIDER	3"	1/2		F	HUB DRAIN VIA AI	IR GAP	
	ELKAY EZH2O BOTTLEFILLING STATION & BI-LEVEL HIGH EFFICIENCY VANDAL-RESISTANT COOLER		RED COMPONENTS AND ACCESSORIES FOR A		PROVIDER	PROVIDE WITH WALL CARRIEN	R AND ANY ADDITIONAL R INSTALLATION.	2" -	EXIST 1/2	"-		ADA COMPLIANT		
	FD-1 ADJUSTABLE ROUND NICKEL-BRONZE FLOOR DRAIN		RED COMPONENTS AND ACCESSORIES FOR A	SIOUX CHIEF	832-35D-NR	INSTALL IN ACCORDANCE WIT FROM MANUFACTURER AND A ROUND NICKEL-BRONZE COV	ACCESSIBILITY CODE.	EXIST	EXIST EXI		F	PROVIDE WTIH AS	SSE 1072 LISTEI	
		COMPLETE AND OPERATIO	NAL INSTALLATION		002 00D WK	REQUIRED		, , , , , , , , , , , , , , , , , , ,				RECTORSEAL MO		
				PARIJAL P1 NOT TO SCALE	KEY PLAN									
	ANNOTATION & SYMBOL LEGEN	ND	ABBREVIATIONS		C	CLEANOUT SCHE	DULE]			
	CONNECT TO EXISTING POINT OF INTERFACE BETWEEN CONTRACTORS	ß	AAV AIR ADMITTANCE VALVE AD AREA DRAIN AFF ABOVE FINISHED FLOOR AFG ABOVE FINISHED GRADE	HB HOSE BIBB HD HUB DRAIN HW HOT WATER HWR HOT WATER RET	TURN	MARK DESCRIPTION FCO FLOOR CLEANOUT WCO WALL CLEANOUT (IN GCO GRADE CLEANOUT (IN	MANUFACTU WATTS ITERIOR) WATTS	JRER	MODEL NUMBE	R				
	CONNECT TO EXISTING	ß	AAVAIR ADMITTANCE VALVEADAREA DRAINAFFABOVE FINISHED FLOORAFGABOVE FINISHED GRADEAPACCESS PANELAPPROXAPPROXIMATEARCHARCHITECTURALBLDGBUILDING	HD HUB DRAIN HW HOT WATER HWR HOT WATER RET IN. INCH OR INCHES INV INVERT KW KILOWATT LAV LAVATORY	turn s S	MARK DESCRIPTION FCO FLOOR CLEANOUT WCO WALL CLEANOUT (IN GCO GRADE CLEANOUT (IN SHOCK ARRESTO	MANUFACTU WATTS ITERIOR) WATTS EXTERIOR) WATTS OR SCHEDUI	.E						
	CONNECT TO EXISTING POINT OF INTERFACE BETWEEN CONTRACTOR: CONTINUATION OF PIPING OR SYSTEM, ANNOT	ß	AAVAIR ADMITTANCE VALVEADAREA DRAINAFFABOVE FINISHED FLOORAFGABOVE FINISHED GRADEAPACCESS PANELAPPROXAPPROXIMATEARCHARCHITECTURALBLDGBUILDINGBTUHBRITISH THERMAL UNIT /HOURCACOMPRESSED AIRCDCONDENSATE DRAINCFHCUBIC FEET PER HOUR	HD HUB DRAIN HW HOT WATER HWR HOT WATER RET IN. INCH OR INCHES INV INVERT KW KILOWATT LAV LAVATORY LBS POUNDS MAX MAXIMUM MFR MANUFACTUREF MIN MINIMUM	TURN S S DE	MARK DESCRIPTION FCO FLOOR CLEANOUT WCO WALL CLEANOUT (IN GCO GRADE CLEANOUT (IN SHOCK ARRESTO ESIGNATION MANUFACTURER A WATTS	MANUFACTU WATTS ITERIOR) WATTS EXTERIOR) WATTS	.E	FIXTURE UNIT 01 - 11					
	CONNECT TO EXISTING POINT OF INTERFACE BETWEEN CONTRACTORS CONTINUATION OF PIPING OR SYSTEM, ANNOT DIRECTION OF FLOW (#) (#) (#) (#) (#) (#) (#) (#) (#) (#)	IS ATION BREAK	AAVAIR ADMITTANCE VALVEADAREA DRAINAFFABOVE FINISHED FLOORAFGABOVE FINISHED GRADEAPACCESS PANELAPPROXAPPROXIMATEARCHARCHITECTURALBLDGBUILDINGBTUHBRITISH THERMAL UNIT /HOURCACOMPRESSED AIRCDCONDENSATE DRAINCFHCUBIC FEET PER HOURCFMCUBIC FEET PER MINUTECLGCEILINGCOCLEANOUTCONCCONCETE	HDHUB DRAINHWHOT WATERHWRHOT WATER RETIN.INCH OR INCHESINVINVERTKWKILOWATTLAVLAVATORYLBSPOUNDSMAXMAXIMUMMFRMANUFACTUREFMINMINIMUMMTDMOUNTEDNICNOT IN CONTRACNONORMALLY OPENNo. OR #NUMBER	TURN S S DE R	MARK DESCRIPTION FCO FLOOR CLEANOUT WCO WALL CLEANOUT (IN GCO GRADE CLEANOUT (IN SHOCK ARRESTO ESIGNATION MANUFACTURER A WATTS	MANUFACTU WATTS ITERIOR) WATTS EXTERIOR) WATTS OR SCHEDUI	LE TYPE	FIXTURE UNIT					
	CONNECT TO EXISTING OUNT OF INTERFACE BETWEEN CONTRACTORS CONTINUATION OF PIPING OR SYSTEM, ANNOT DIRECTION OF FLOW (#) (#) (#) EQUIPPED TO BE REMOVED / DEMOLISHED (III) (III) (IIII) (IIIII) (IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	'S 'ATION BREAK IXTURE,108°F	AAVAIR ADMITTANCE VALVEADAREA DRAINAFFABOVE FINISHED FLOORAFGABOVE FINISHED GRADEAPACCESS PANELAPPROXAPPROXIMATEARCHARCHITECTURALBLDGBUILDINGBTUHBRITISH THERMAL UNIT /HOURCACOMPRESSED AIRCDCONDENSATE DRAINCFHCUBIC FEET PER HOURCFMCUBIC FEET PER MINUTECLGCEILINGCOCLEANOUT	HDHUB DRAINHWHOT WATERHWRHOT WATER RETIN.INCH OR INCHESINVINVERTKWKILOWATTLAVLAVATORYLBSPOUNDSMAXMAXIMUMMFRMANUFACTUREFMINMINIMUMMTDMOUNTEDNICNOT IN CONTRACNONORMALLY OPEN	TURN S S DE R ICT INED W AND YOKE	MARKDESCRIPTIONFCOFLOOR CLEANOUTWCOWALL CLEANOUT (INGCOGRADE CLEANOUT (INBKOCKARRESTOESIGNATIONMANUFACTURERAWATTSBWATTSCWATTS	MANUFACTU WATTS WATTS EXTERIOR) WATTS DR SCHEDUI SERIES A A B C	LE TYPE	FIXTURE UNIT 01 - 11 12 - 32 33 - 60					
	CONNECT TO EXISTING POINT OF INTERFACE BETWEEN CONTRACTORS CONTINUATION OF PIPING OR SYSTEM, ANNOT DIRECTION OF FLOW (#) (#) (#) (#) (#) (#) (#) (#) (#) (#)	'S 'ATION BREAK IXTURE,108°F	AAVAIR ADMITTANCE VALVEADAREA DRAINAFFABOVE FINISHED FLOORAFGABOVE FINISHED GRADEAPACCESS PANELAPPROXAPPROXIMATEARCHARCHITECTURALBLDGBUILDINGBTUHBRITISH THERMAL UNIT /HOURCACOMPRESSED AIRCDCONDENSATE DRAINCFHCUBIC FEET PER HOURCFMCUBIC FEET PER MINUTECLGCEILINGCONCCONCRETECONNCONNECTIONCOCRDCOCRDINATECWCOLD WATERDEGDEGREESDFUDRAINAGE FIXTURE UNITSDIADIAMETERDNDOWNDPDIFFERENTIAL PRESSUREDWGDRAWINGECELECTRICAL CONTRACTOR	HDHUB DRAINHWHOT WATERHWRHOT WATER RETIN.INCH OR INCHESINVINVERTKWKILOWATTLAVLAVATORYLBSPOUNDSMAXMAXIMUMMFRMANUFACTUREFMINMINIMUMMTDMOUNTEDNICNOT IN CONTRACNOOR CENTEROCON CENTEROS&YOUTSIDE SCREWP#PUMP NUMBERPDPRESSURE DROIPVCPOLY-VINYL CHLPCPLUMBING CONTRDROOF DRAINRMROOMRWLRAIN WATER LEFSANSANITARY	TURN S S DE R CT NED N AND YOKE DP LORIDE TRACTOR	MARKDESCRIPTIONFCOFLOOR CLEANOUTWCOWALL CLEANOUT (INGCOGRADE CLEANOUT (IBWATTSAWATTSBWATTSCWATTSDWATTSEWATTS	MANUFACTU WATTS WATTS EXTERIOR) WATTS DR SCHEDUI SERIES A A B C C C C C C C C C C	LE TYPE	FIXTURE UNIT 01 - 11 12 - 32 33 - 60 61 - 113 114 - 154					
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	CONNECT TO EXISTING POINT OF INTERFACE BETWEEN CONTRACTOR CONTINUATION OF PIPING OR SYSTEM, ANNOT, DIRECTION OF FLOW CONTINUATION OF PIPING OR SYSTEM, ANNOT, CONTINUATION OF PIPING OF PLOW CONTINUATION OF PIPING OR SYSTEM, ANNOT, CONTINUATION OF PIPING OF PLOW CONTINUATION OF PIPING OF PLOW CONTINUATION BUBBLE CONTINUATION BUBBLE CONTINUATION BUBBLE CONTINUATION CLOUD, DELTA / CHANGE MARK CONTINUATION BUBBLE CONTINUATION BUBBLE CONTINUATION CLOUD, DELTA / CHANGE MARK CONTINUATION BUBBLE CONTINUATION CLOUD, DELTA / CHANGE MARK CONTINUATION CLOUD, C	S ATION BREAK IXTURE,108°F ER) FIXTURE FIXTURE FIXTURE CONNECTION SANITARY FIXTURE TAG DFU (WHERE SHOWN)	AAV AIR ADMITTANCE VALVE AD AREA DRAIN AFF ABOVE FINISHED FLOOR AFG ABOVE FINISHED GRADE AP ACCESS PANEL APPROX APPROXIMATE ARCH ARCHITECTURAL BLDG BUILDING BTUH BRITISH THERMAL UNIT /HOUR CA COMPRESSED AIR CD CONDENSATE DRAIN CFH CUBIC FEET PER MOUR CFM CUBIC FEET PER MINUTE CLG CELLING CO CLEANOUT CONC CONCRETE CONN CONNECTION CORD COORDINATE CW COLD WATER DEG DEGREES DFU DRAINAGE FIXTURE UNITS DIA DIAMETER DN DOWN DP DIFFERENTIAL PRESSURE DWG DRAWING EC ELECTRICAL CONTRACTOR ELEC ELECTRICAL EQUIP EQUIPMENT ETC ETCETERAS EWC ELECTRICAL EQUIP EQUIPMENT ETC ETCETERAS EWC ELECTRIC WATER COOLER EWH ELECTRIC WATER TEMPERATURE EX EXISTING FCO FLOOR CLEANOUT FD FUON CLEANOUT FD FUON RAIN FD FUNREL FLOOR DRAIN FT FEET FU FIXTURE UNITS FURN FURNISHED GC GENERAL EWT ENTERING WATER TEMPERATURE EX EXISTING FCO FLOOR CLEANOUT FD FUON CLEANOUT FD FUON RAIN FT FEET FU FIXTURE UNITS FURN FURNISHED GC GENERAL CONTRACTOR ELSC ELECTRIC WATER TEMPERATURE EX EXISTING FCO FLOOR CLEANOUT FD FUNNEL FLOOR DRAIN FT FEET FU FIXTURE UNITS FURN FURNISHED GC GENERAL CONTRACTOR GCO GRADE CLEANOUT FD FUNNEL FLOOR DRAIN FT FEET FU FIXTURE UNITS FURN FURNISHED GC GENERAL CONTRACTOR GCO GRADE CLEANOUT FD FUNNEL FLOOR DRAIN FT FEET FU GALLONS PER MINUTE ENTIRE INSTALLATION SHALL COMPLY WITH CODES STANDARDS OR ANY OTHER LOCALLY ADOPTED AM	HD HUB DRAIN HW HOT WATER HWR HOT WATER RET IN. INCH OR INCHES INV INVERT KW KILOWATT LAV LAVATORY LBS POUNDS MAX MAXIMUM MFR MANUFACTUREF MIN MINIMUM MTD MOUNTED NIC NOT IN CONTRAC NO NORMALLY OPEI NO. OR # NUMBER OC ON CENTER OS&Y OUTSIDE SCREW P.# PUMP NUMBER PD PRESSURE DROI PVC POLY-VINYL CHL PC PLUMBING CONT RD ROOF DRAIN RM ROOM RWL RAIN WATER LEA SAN SANITARY SF SQUARE FEET ST STORM TD TRENCH DRAIN TEMP TEMPERATURE TYP TYPICAL UG UNDER GROUND UON UNLESS OTHERW UR URINAL VAC VACUUM VFD VARIABLE FREQU UG UNDER GROUND UON UNLESS OTHERW UR URINAL VAC VACUUM VFD VARIABLE FREQU VIF VERIFY IN FIELD VOL VOLUME VTR VENT THROUGH WC WATER CLOSET WCO WALL CLEANOUT WH WALL HYDRANT WHA WATER HAMMER WP WEATHER PROO WSFU WATER SUPPLY YVB YARD VALVE BOT	TURN S S CT (NED N AND YOKE P LORIDE TRACTOR ADER ADER O WISE NOTED NUENCY DRIVE O WISE NOTED NUENCY DRIVE T RARRESTER OF FIXTURE UNITS X C REFERENCED	MARK DESCRIPTION FCO FLOOR CLEANOUT (IN GCO GRADE CLEANOUT (IN GCO GRADE CLEANOUT (IN SHOCK ARRESTO ESIGNATION MANUFACTURER A WATTS B WATTS C WATTS C WATTS C WATTS C WATTS F WATTS F WATTS SAUTARY PIPING GREASE WASTER SAUTARY PIPING	MANUFACTU WATTS WATTS WATTS WATTS WATTS R SCHEDU SERIES SERIE	MATERIAL, V PVC, SCHED NA PVC, SCHED NA PVC, SCHED NA	FIXTURE UNIT 01 - 11 12 - 32 33 - 60 61 - 113 114 - 154 155 - 130 ULE 40 ULE 40 ULE 40 ULE 40 ULE 40 ULE 40 ULE 40	S	MA		JLESS HANGERS	
	CONNECT TO EXISTING POINT OF INTERFACE BETWEEN CONTRACTOR CONTINUATION OF PIPING OR SYSTEM, ANNOT, DIRECTION OF FLOW CONTINUATION OF PIPING OR SYSTEM, ANNOT, CONTINUATION OF PIPING OF PLOW CONTINUATION OF PIPING OR SYSTEM, ANNOT, CONTINUATION OF PIPING OF PLOW CONTINUATION OF PIPING OF PLOW CONTINUATION BUBBLE CONTINUATION BUBBLE CONTINUATION BUBBLE CONTINUATION CLOUD, DELTA / CHANGE MARK CONTINUATION BUBBLE CONTINUATION BUBBLE CONTINUATION CLOUD, DELTA / CHANGE MARK CONTINUATION BUBBLE CONTINUATION CLOUD, DELTA / CHANGE MARK CONTINUATION CLOUD, C	S ATION BREAK IXTURE,108°F ER) FIXTURE,108°F ER) FIXTURE FIXTURE FIXTURE CONNECTION SANITARY FIXTURE TAG DFU (WHERE SHOWN) SANITARY	AAV AIR ADMITTANCE VALVE AD AREA DRAIN AFF ABOVE FINISHED FLOOR AFG ABOVE FINISHED GRADE AP ACCESS PANEL APPROX APPROXIMATE ARCH ARCHITECTURAL BLDG BUILDING BTUH BRITISH THERMAL UNIT /HOUR CA COMPRESSED AIR CD CONDENSATE DRAIN CFH CUBIC FEET PER HOUR CFM CUBIC FEET PER MOUR CFM CUBIC FEET PER MINUTE CLG CELLING CO CLEANOUT CONC CONCRETE CONN CONNECTION COORD COORDINATE CW COLD WATER DEG DEGREES DFU DRAINAGE FIXTURE UNITS DIA DIAMETER DN DOWN DP DIFFERENTIAL PRESSURE DWG DRAWING EC ELECTRICAL CONTRACTOR EL ELEVATION ELC ELECTRICAL CONTRACTOR EL ELECTRICAL EQUIP EQUIPMENT ETC ETCETERAS EWC ELECTRIC WATER HEATER EWT ENTERING WATER TEMPERATURE EX EXISTING FCO FLOOR CLEANOUT FD FUNEL FLOOR DRAIN FFD FUNEL FLOOR DRAIN FLORIDA FUEL GAS CODE: FLORIDA FUEL GAS CODE: FLORIDA FIRE CODE: FLORIDA FIRE CODE: FLORIDA FUEL GAS CODE:	HD HUB DRAIN HW HOT WATER HWR HOT WATER RET IN. INCH OR INCHES INV INVERT KW KILOWATT LAV LAVATORY LBS POUNDS MAX MAXIMUM MFR MANUFACTUREF MIN MINIMUM MTD MOUNTED NIC NOT IN CONTRAC NO NORMALLY OPEN NO. OR # NUMBER OC ON CENTER OS&Y OUTSIDE SCREW P-# PUMP NUMBER PD PRESSURE DROI PVC POLY-VINYL CHL PC PLUMBING CONT RD ROOF DRAIN RM ROOM RWL RAIN WATER LEA SAN SANITARY SF SQUARE FEET ST STORM TD TRENCH DRAIN TEMP TEMPERATURE TYP TYPICAL UG UNDER GROUND UON UNLESS OTHERV UR URINAL VAC VACUUM VFD VARIABLE FREQU VIF VERIFY IN FIELD VOL VOLUME VTR VENT THROUGH WC WATER CLOSET WCO WALL CLEANOUT WH WALL HYDRANT WHA WATER HAMMER WP WEATHER PROO WSFU WATER SUPPLY YVB YARD VALVE BOO	TURN S S CT (NED WAND YOKE P LORIDE TRACTOR ADER D WISE NOTED NUENCY DRIVE NUENCY DRIVE NUENCY DRIVE S T RARRESTER DF FIXTURE UNITS IX C REFERENCED	MARK DESCRIPTION FCO FLOOR CLEANOUT (IN GCO GRADE CLEANOUT (IN GCO GRADE CLEANOUT (IN SHOCCX ARRESTO SHOCX ARRESTO SIGNATION MANUFACTURER MATTS MATTS MATTS WATTS MATS MA	MANUFACTUWATTSEXTERIOR)WATTSEXTERIOR)WATTSRSCLEDUSERIESSERIES1311<	MATERIAL, V PVC, SCHED NA NA	FIXTURE UNIT 01 - 11 12 - 32 33 - 60 61 - 113 114 - 154 155 - 130 ULE 40 ULE 40 ULE 40 ULE 40 ULE 40 ULE 40 ULE 40 ULE 40	S S S S S S S S S S S S S S S S S S S	/PE A		ILESS HANGERS	

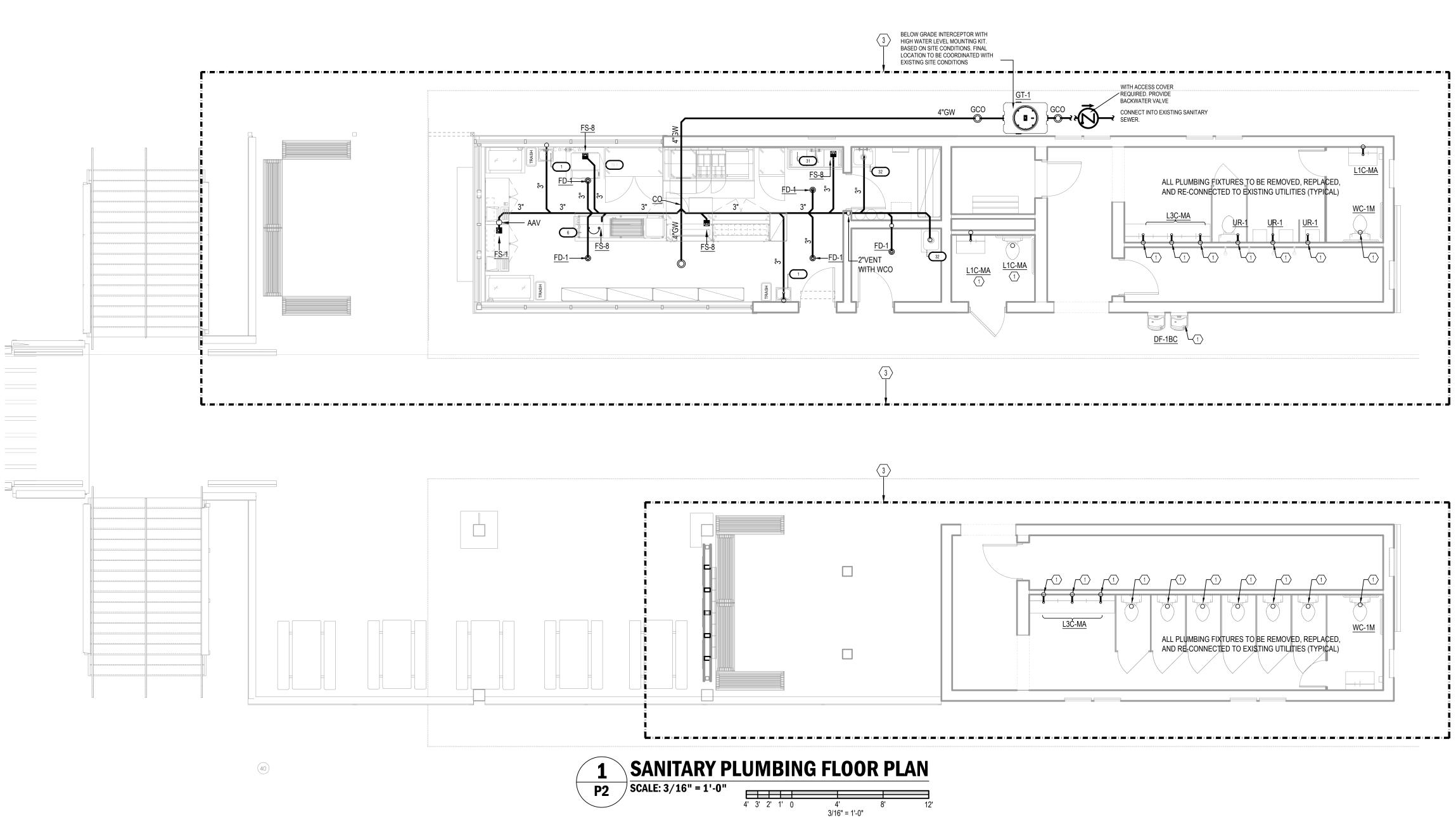








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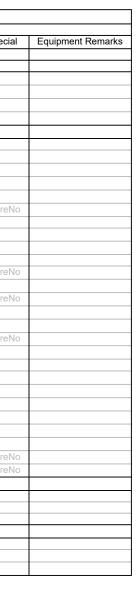


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											ELE	ECTRICAL							PLUMBIN	G				
ItemNo	Quantity	/ Unit	Category	Mfr	Model	StockModel	Voltage	Phase Ar	nps C	ycle Hp	> Kw	ConnectionTyp	e NEMA	ElectricalConnectionHeight	Cold Water (in)	Cold Water Conn. Height(in)) Hot Water (in)	Hot Water Conn. Height(i	n) Indirect Waste Size	Direct Waste Size	Direct Waste Conn. Height(in)	Gas Size(in) GasConn.Height(in)	Gas MBTU	Special
1	2	ea	Hand Sink	Krowne	HS-26L										1/2"		1/2"			1-1/2"				
	2	ea		Krowne	H-100															1-1/2"				
2	12	ea	Wire Shelving	John Boos	EPS-1448-G-X																			
3	2	ea	POS System	Custom	POS																			
4	1	ea	Chest Freezer	Atosa USA, Inc.	MMF9113		115	1 1	.6	60		Cord & Plug	5-15P											
5.1	2	ea	Back Bar Cabinet, Refrigerated	True Mfg General Foodservice	TBB-24-48G-HC-LD)	115	1 3	21 (60 1/5	5	Cord & Plug	5-15P											
6	1	ea	Soda Ice & Beverage Dispenser	Cornelius	621053405	-	115	1 3	.0	60	-		0.01											+
	1	ea	ggp	Cornelius	E400397		115			60 1/3	3													
7	1	ea	Work Table, Stainless Steel Top	Advance Tabco	SLAG-308-X																			
8	1	ea	Hot Dog Grill	APW Wyott	HR-50		120	1 1	0.8	60	1.32	Cord & Plug	5-15P											
9	1	ea	Display Case. Hot Food. Countertop	Hatco	FDWD-1-120-QS		120		1.6		1.39	Cord & Plug	0 101											
10	1	ea	Undercounter Refrigerator	True Mfg General Foodservice	TUC-48D-2-HC		115			60 1/5		Cord & Plug	5-15P											
10	1	ca	Spare Number	The Mig General Foodservice	100-400-2-110		115	1	5	00 1/.	,	oord a ridg	J-13F											SpareNo
10	1	0.0	Overshelf	John Boos	OS-ED-1848-X						_													Sparento
12	1	ea	Heat Lamp	Hatco	GRAH-42-120-T-QS	2	120	1		60	.95													
1.0	1	ea	Sandwich / Salad Preparation Refrigerator	True Mfg General Foodservice	TSSU-60-16-HC	,	115	1 6		60 1/3		Cord & Plug	5-15P											
14	1	ea	Overshelf	John Boos	OS-ED-1860-X		115	1 0	0.0	00 1/.		Colu & Flug	0-10P											
16	1	ea	Spare Number	30111 0005	03-LD-1000-X						-													SpareNo
10	4		Chest Freezer	Atosa USA, Inc.	MMF9110		115	4 4	.6	60		Cord & Plug	E 46D											Oparento
17		ea	Spare Number	Alosa OSA, IIIC.	IVIIVIF9110		115	1	.0	00		Colu & Flug	0-10P											Charabla
18	4		1				115			00 01	4		E (5D		0.1011				4.101					SpareNo
19.1	1	ea	Ice Maker with Bin, Cube-Style	Manitowoc	UDF0310A		115			60 3/4			5-15P		3/8"				1/2"					
20.1	1	ea	Undercounter Refrigerator	True Mfg General Foodservice	TUC-60-HC		115	1	4 (60 1/4	1	Cord & Plug	5-15P											
21			Spare Number																					SpareNo
22	1	ea	Reach-In Freezer	True Mfg General Foodservice	TS-23F-HC		115	1 3	.7 (60 1/2	2	Cord & Plug	5-15P											
23	1	ea		Accurex																				
24	1	ea	Pizza Bake Oven, Countertop, Electric	Bakers Pride	P44S		208	1 3	4.6	60		Cord & Plug	6-50P											
25	1	ea	Undercounter Refrigerator	True Mfg General Foodservice	TUC-27D-2-HC		115	1	2 (60 1/6	6	Cord & Plug	5-15P											
26	2	ea	Electric Floor Fryer	Imperial	IFS-40-E						14.0													
	2			Imperial			208	1 (68 (60	14													
27	1	ea	Griddle, Electric, Countertop	Imperial	ITG-24-E		208	3 2	9.0	60	8.0													
28	5	ea	Wire Shelving	John Boos	EPS-1830-G-X																			
29			Spare Number																					SpareNo
30			Spare Number																					SpareNo
31	1	ea	Three (3) Compartment Sink	John Boos	3B184-X																			
	1	ea		John Boos	3B184-X																			
	1	ea		John Boos	3B184-X																			
	1	ea		Krowne	18-708L										1/2"		1/2"							
32	1	ea	Mop Sink	Krowne	MS-2424															2"				
	1	ea		Krowne	16-127										1/2"		1/2"							
33	1	ea	Booster Heater, Tankless, Electric	Hubbell	JTX031-6RS		208	1 1	49 (60	31						3/4"							
34	5	ea	Wire Shelving	John Boos	EPS-2472-G-X																			

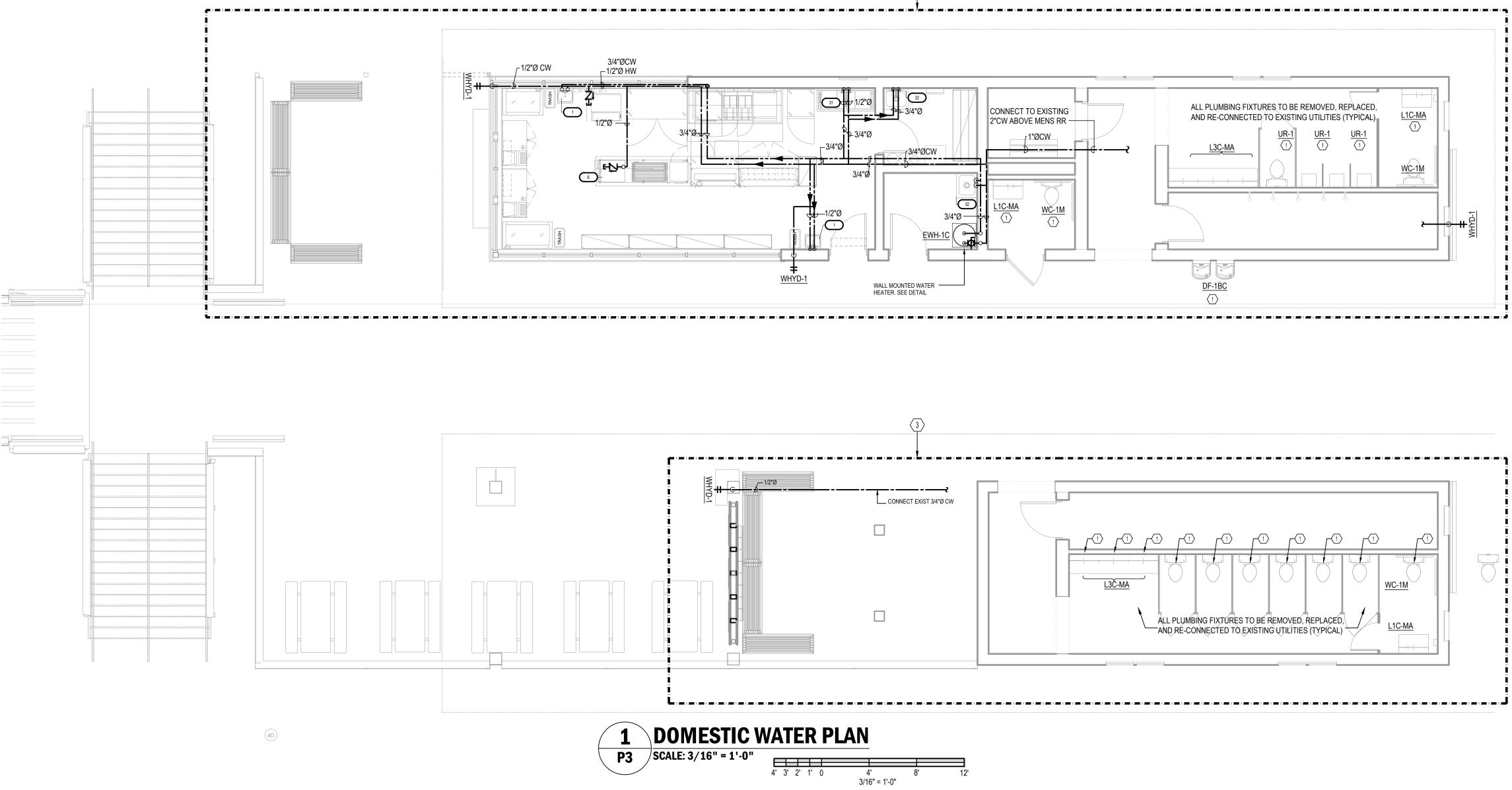


- REMOVE EXISTING PLUMBING FIXTURE AND REPLACE WITH NEW. PROVIDE WITH ALL REQUIRED ACCESSORIES FOR COMPLETE ISNTALLATION
- 2 OMITTED
- (3) LIMIT OF WORKSCOPE COVERED BY THIS DRAWING SET. REFER TO DESIGN DRAWINGS PROVIDED AND DESIGNED BY OTHERS. COORDINATE WORK SCOPE WITH GENERAL CONTRACTOR.



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	NAPLES PIER	RECONSIRUCIION 25 12th Ave S.	Naples, FL 34102
		MECHANICAL ELECTRICAL PLUMBING ENGINEERING 2534 SE SANTA BARBARA PLACE #201 CAPE CORAL, FLORIDA 33904 239.770.0513 NICK®NPSCONSULTINGLLC.COM	NICHOLAS P. STEWART PRESIDENT WWW.NPSConsultingLLC.COM MICHAEL D. STEWART, PE FLA REG #72459 COPYRIGHTED 2024
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BID DRAWINGS			

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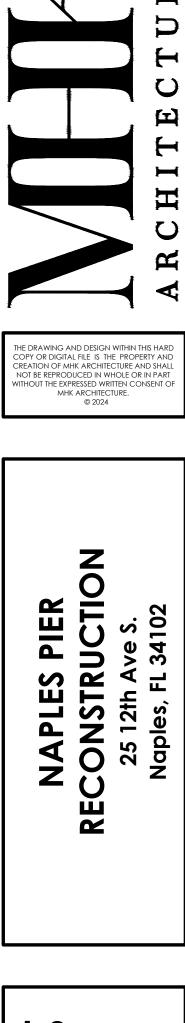
													EQUIPMENT	SUREDULE											
	_		-		1						ELECTRICAL			_				PLUMBING							
emNo (Quantity	Unit	Category	Mfr	Model	StockModel	Voltage	Phase A	mps Cy	cle Hp	Kw Connectior	Type NEM	A ElectricalConnectionHeight) Cold Water Conn. Height(i		Hot Water Conn. Height(in)	Indirect Waste Size		e Direct Waste Conn. Heig	ht(in) Gas Size(in)	GasConn.Height(in)	Gas MBTU S	pecial Equi	Jipment Rem
1	2	ea	Hand Sink	Krowne	HS-26L									1/2"		1/2"			1-1/2"						
	2	ea		Krowne	H-100														1-1/2"			_			
2	12	ea	Wire Shelving	John Boos	EPS-1448-G-X																				
3	2	ea	POS System	Custom	POS																				
4	1	ea	Chest Freezer	Atosa USA, Inc.	MMF9113		115		1.6 6		Cord & F	0 0	P												
5.1	2	ea	Back Bar Cabinet, Refrigerated	True Mfg General Foodservice	TBB-24-48G-HC-LE)	115		2.1 6		Cord & F	lug 5-15	P												
6	1	ea	Soda Ice & Beverage Dispenser	Cornelius	621053405		115		3.0 6																
	1	ea		Cornelius	E400397		115	1	6.5 6	0 1/3															
7	1	ea	Work Table, Stainless Steel Top	Advance Tabco	SLAG-308-X																				
8	1	ea	Hot Dog Grill	APW Wyott	HR-50		120		0.8 6		1.32 Cord & F	0 0	P												
9	1	ea	Display Case, Hot Food, Countertop	Hatco	FDWD-1-120-QS		120		1.6 6	-	1.39 Cord & F	<u> </u>													
10	1	ea	Undercounter Refrigerator	True Mfg General Foodservice	TUC-48D-2-HC		115	1	3 6	0 1/5	Cord & F	'lug 5-15	P												
11			Spare Number																				S	pareNo	
12	1	ea	Overshelf	John Boos	OS-ED-1848-X																				
13	1	ea	Heat Lamp	Hatco	GRAH-42-120-T-QS	6	120	1	6	-	.95														
14	1	ea	Sandwich / Salad Preparation Refrigerator		TSSU-60-16-HC		115	1	6.5 6	0 1/3	Cord & F	'lug 5-15	P												
5	1	ea	Overshelf	John Boos	OS-ED-1860-X																				
16			Spare Number																				5	pareNo	
17	1	ea	Chest Freezer	Atosa USA, Inc.	MMF9110		115	1	1.6 6	0	Cord & F	'lug 5-15	P												
18			Spare Number																				5	pareNo	
9.1	1	ea	Ice Maker with Bin, Cube-Style	Manitowoc	UDF0310A		115		10 6			5-15	P	3/8"				1/2"							
20.1	1	ea	Undercounter Refrigerator	True Mfg General Foodservice	TUC-60-HC		115	1	4 6	0 1/4	Cord & F	lug 5-15	P												
21			Spare Number																				S	pareNo	
22	1	ea	Reach-In Freezer	True Mfg General Foodservice	TS-23F-HC		115	1	3.7 6	0 1/2	Cord & F	lug 5-15	P												
23	1	ea		Accurex																					
24	1	ea	Pizza Bake Oven, Countertop, Electric	Bakers Pride	P44S		208		34.6 6	-	Cord & F	0 0 0	P												
25	1	ea	Undercounter Refrigerator	True Mfg General Foodservice	TUC-27D-2-HC		115	1	2 6	0 1/6	Cord & F	lug 5-15	P												
26	2	ea	Electric Floor Fryer	Imperial	IFS-40-E						14.0														
	2			Imperial			208		68 6		14														
27	1	ea	Griddle, Electric, Countertop	Imperial	ITG-24-E		208	3 2	9.0 6	0	8.0														
28	5	ea	Wire Shelving	John Boos	EPS-1830-G-X																				
29			Spare Number																				S	pareNo	
30			Spare Number																				S	areNo	
31	1	ea	Three (3) Compartment Sink	John Boos	3B184-X																				
	1	ea		John Boos	3B184-X																				
	1	ea		John Boos	3B184-X									4./01		4./01									
20	1	ea	Man Sink	Krowne	18-708L									1/2"		1/2"			0"				┥──┤		
32	1	ea	Mop Sink	Krowne	MS-2424									4/0"		4/01			2"				┥──┤		
33	1	ea	Booster Heater, Tankless, Electric	Krowne Hubbell	16-127 JTX031-6RS		208	1 .	149 6	0	31			1/2"		1/2"									
24	5	ea	Wire Shelving	John Boos	EPS-2472-G-X		200	1	143 0	-						3/4									
34	Э	ea	wire Sileiving	JUIII DOUS	EF3-2472-G-X									1		1									

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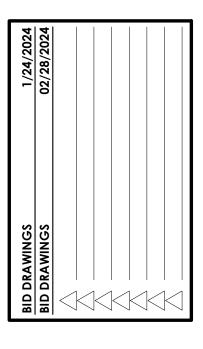
KEYED SHEET NOTES

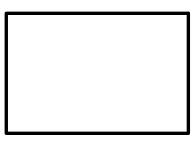
REMOVE EXISTING PLUMBING FIXTURE AND REPLACE WITH NEW. PROVIDE WITH ALL REQUIRED ACCESSORIES FOR COMPLETE INSTALLATION. PROVIDE WITH NEW QUARTER-TURN SUPPLY VALVES.

(3) LIMIT OF WORKSCOPE COVERED BY THIS DRAWING SET. REFER TO DESIGN DRAWINGS PROVIDED AND DESIGNED B OTHERS. COORDINATE WORK SCOPE WITH GENERAL CONTRACTOR.









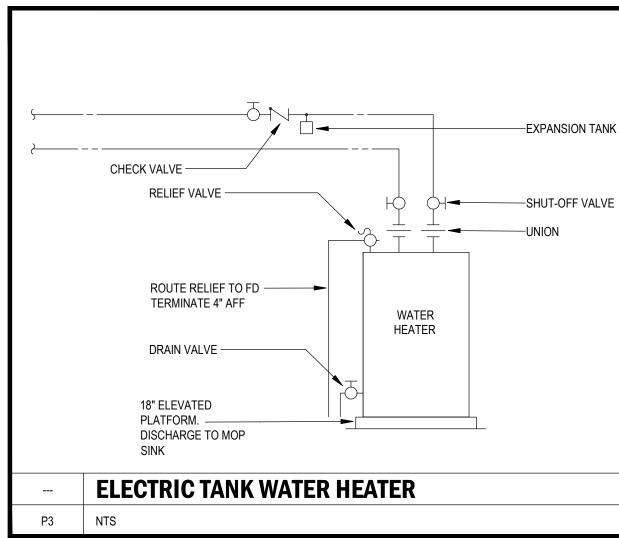
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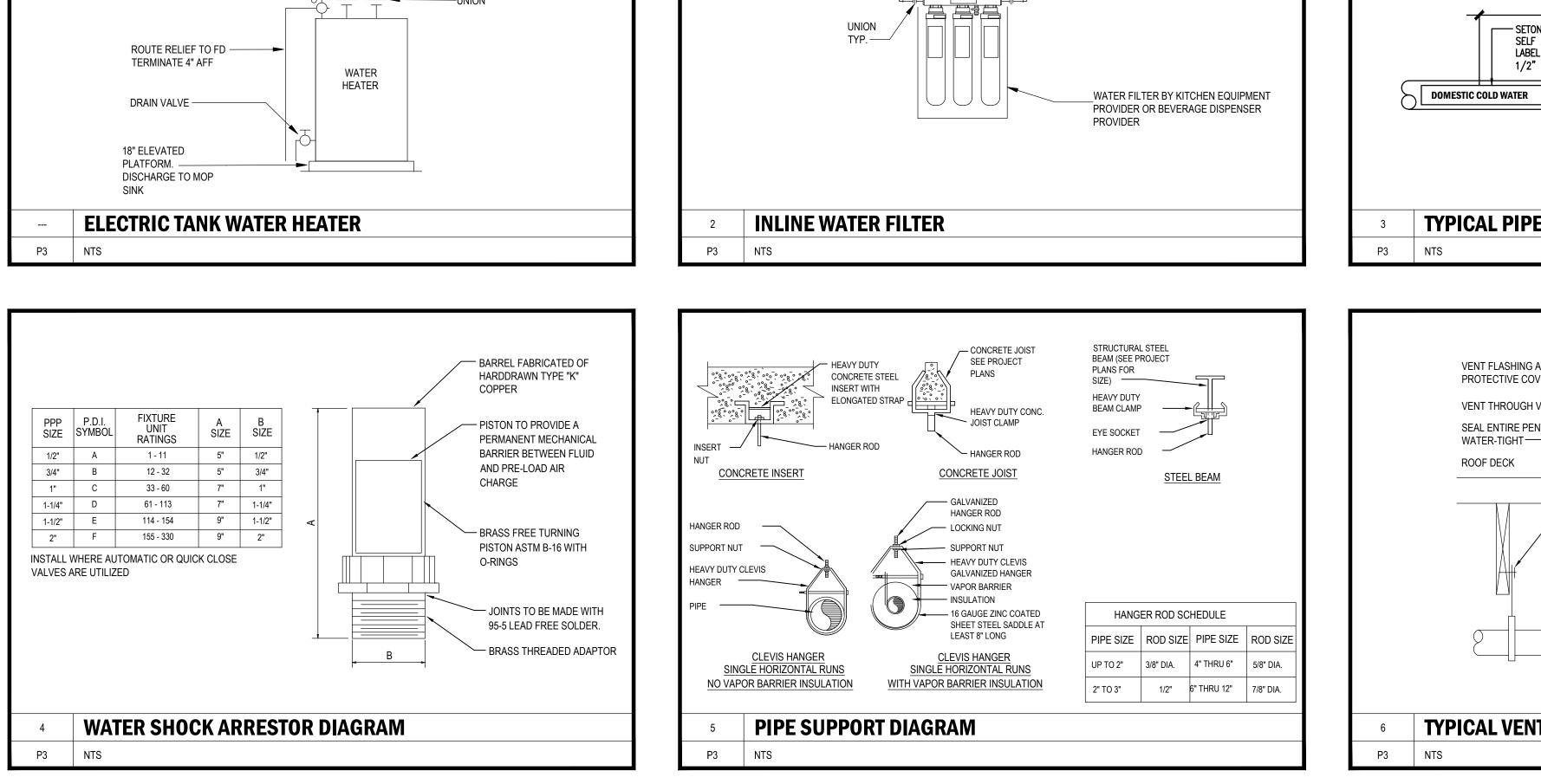
ELECTRIC WATER HEATER SCHEDULE

		BASIS OF DESIGN	CONNECTIONS	PERFORMANCE	EFFICIENCY			PHYSICAL DATA	
MARK	MANUFACTURER - MODEL	DESCRIPTION	CONNECTIONS SIZES (Ø)	GPH (@90° RISE)	UEF	GALLONS (NOMINAL)	DIAMETER x HEIGHT (INCHES)	GALLONS (ACTUAL)	SHIPPING WEIGHT (LBS)
EWH-1C	AO SMITH ENS-40	ELECTRIC TANK TYPE STORAGE WATER HEATER, SHORT	3/4"X3/4"	20.7	0.92	40.0	21"/50"	37.0	125 LBS

	GRE	ASE INTE	RCEPT	OR SIZI	NG CALCUL				
			PDI G101 FIXTU	RE FLOW RATE B	Y VOLUME				
FORMULA A: GPM = ((W)x(L)x(D)x(Cn)x(Cm)x(Qn))/231									
TAG OR IDENTITY DESCRIPTION (W) WIDTH (L) LENGTH (D) DEPTH (Cn) NUMBER OF COMPARTMENTS (Cm) CAPACITY MULTIPLIER (Qn) FIXTURE QUANTITY							CUBIC INCHES		
1	3 COMPARTMENT SINK	18	18	14	3	0.75	1	10206	
2	HAND SINK	10	8	6	1	0.75	1	360	
3	MOP SINK	20	18	8	1	0.75	1	2160	
							TOTAL CUBIC INCHES	12726	
						GPM CONVERSIO	N CONSTANT	231	
SUB-TOTAL FORMULA A GPM									
						SUB-TOTAL FOR	MULA A GPM	55.1	
		F		ATE BY TRAP SIZE :: GPM = (Df)x(Qn)	()	SUB-TOTAL FOR	MULA A GPM		
TAG OR IDENTITY	DESCRIPTION	FI (Ts) TRAP SIZE			()	SUB-TOTAL FOR (DGM) DFU / GPM	MULA A GPM	55.1	
TAG OR IDENTITY FS-8	DESCRIPTION FLOOR SINK		FORMULA B	: GPM = (Df)x(Qn)	(DGM)		MULA A GPM	55.1 SUB-TOTA	
		(Ts) TRAP SIZE	FORMULA E	: GPM = (Df)x(Qn) (Qn) QUANTITY	(DGM) TOTAL DFU	(DGM) DFU / GPM	MULA A GPM	55.1 SUB-TOTA GPM	
FS-8	FLOOR SINK	(Ts) TRAP SIZE 3"	FORMULA E (Df) DFU 5	: GPM = (Df)x(Qn) (Qn) QUANTITY 4	(DGM) TOTAL DFU 20	(DGM) DFU / GPM 2	MULA A GPM	55.1 SUB-TOTA GPM 10	
FS-8	FLOOR SINK	(Ts) TRAP SIZE 3"	FORMULA E (Df) DFU 5	: GPM = (Df)x(Qn) (Qn) QUANTITY 4	(DGM) TOTAL DFU 20 25	(DGM) DFU / GPM 2		55.1 SUB-TOT/ GPM 10	
FS-8	FLOOR SINK	(Ts) TRAP SIZE 3"	FORMULA E (Df) DFU 5	: GPM = (Df)x(Qn) (Qn) QUANTITY 4	(DGM) TOTAL DFU 20 25 GRAND TOTAL GPM =	(DGM) DFU / GPM 2 2	B + FORMULA C	55.1 SUB-TOTA GPM 10 12.5	

	HYDRO-MECHANICAL GREASE INTERCEPTOR SCHEDULE												
ſ		BASIS OF DESIGN		RATING (ASME A112.14.3/CSA B481.1)									
	MARK	MANUFACTURER	MODEL	TYPE	GPM	LIQUID CAPACITY (GALLONS)	SOLIDS CAPACITY (GALLONS)	LOCATION RATING	MATERIAL	WEIGHT (DRY)	■ NOTES		
ſ	GT-1	SCHIER	GB-75	HYDROMECHANICAL	75	125	31	INDOOR/OUTDOOR	POLYETHYLENE	190	INSTALL USING MANUFACTURERS TRAFFIC RATING DETAIL WHEN INSTALLED IN VEHICULAR AREAS.		





24-011	Naples	Pier	Reconstruction - ITB	
	•			

- 3/4" COLD WATER

3/4"

SUPPLY

0

NOTES

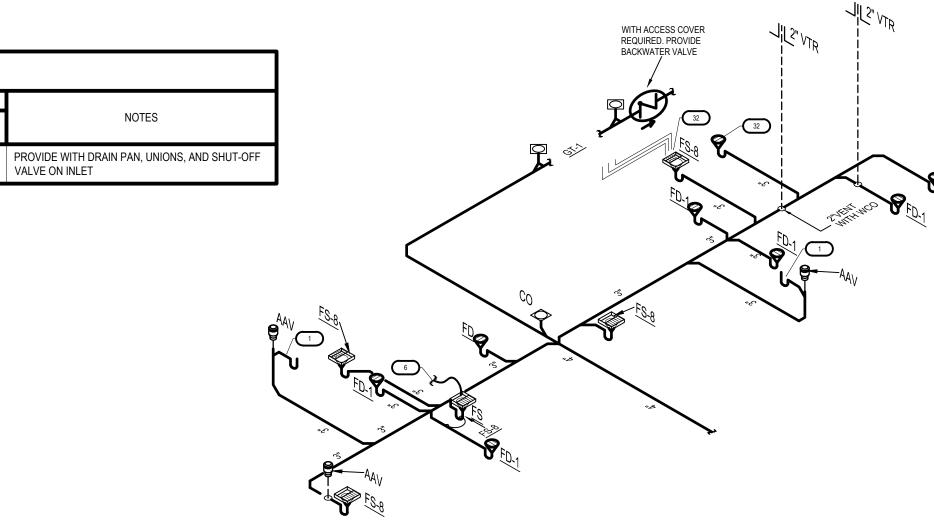
ELECTRICAL

434 LBS 4.5 240/1

VOLTAGE

ILLED WEIGH

(LBS)



SANITARY ISOMETRIC

SANITARY WASTE

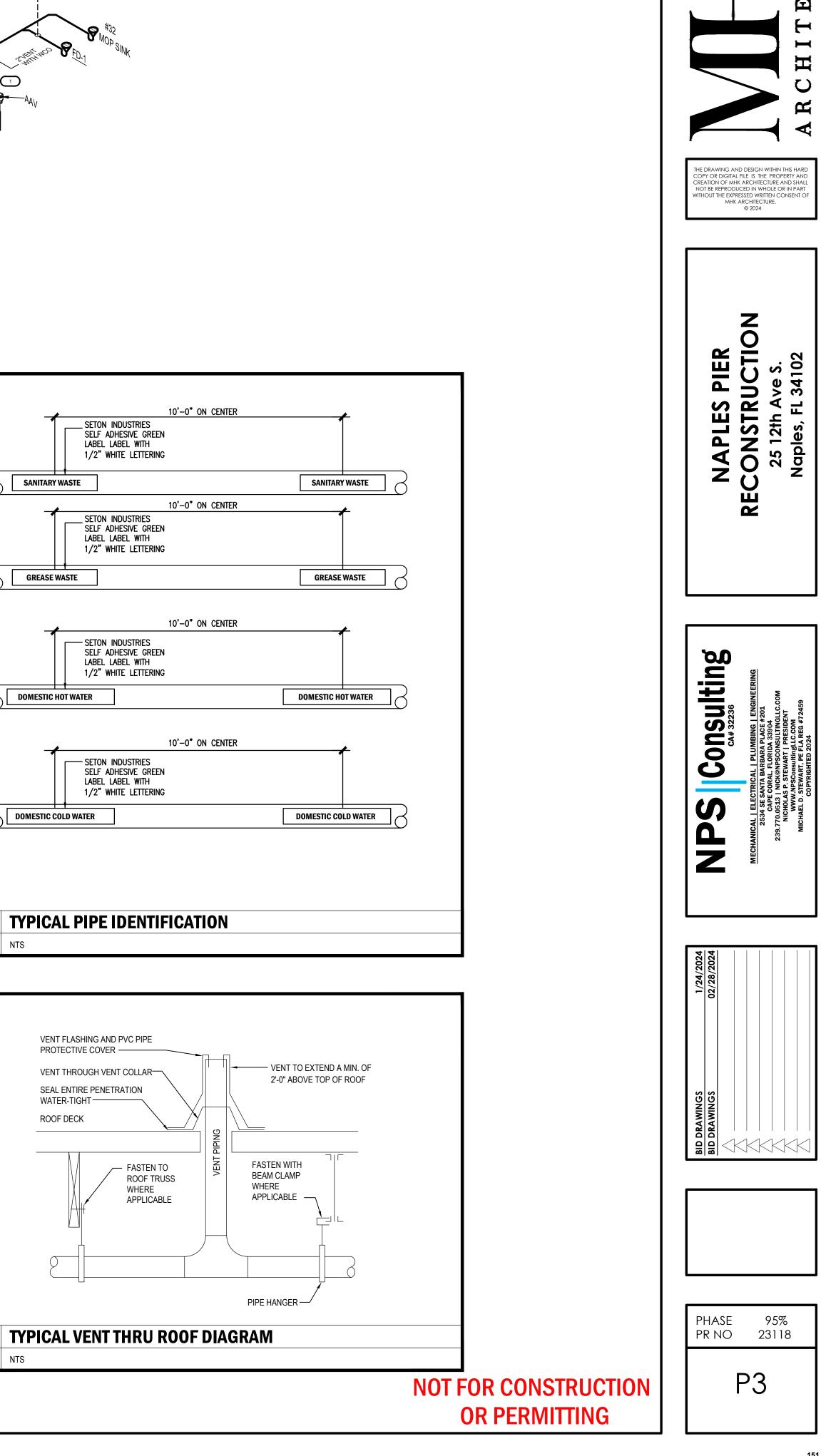
GREASE WASTE

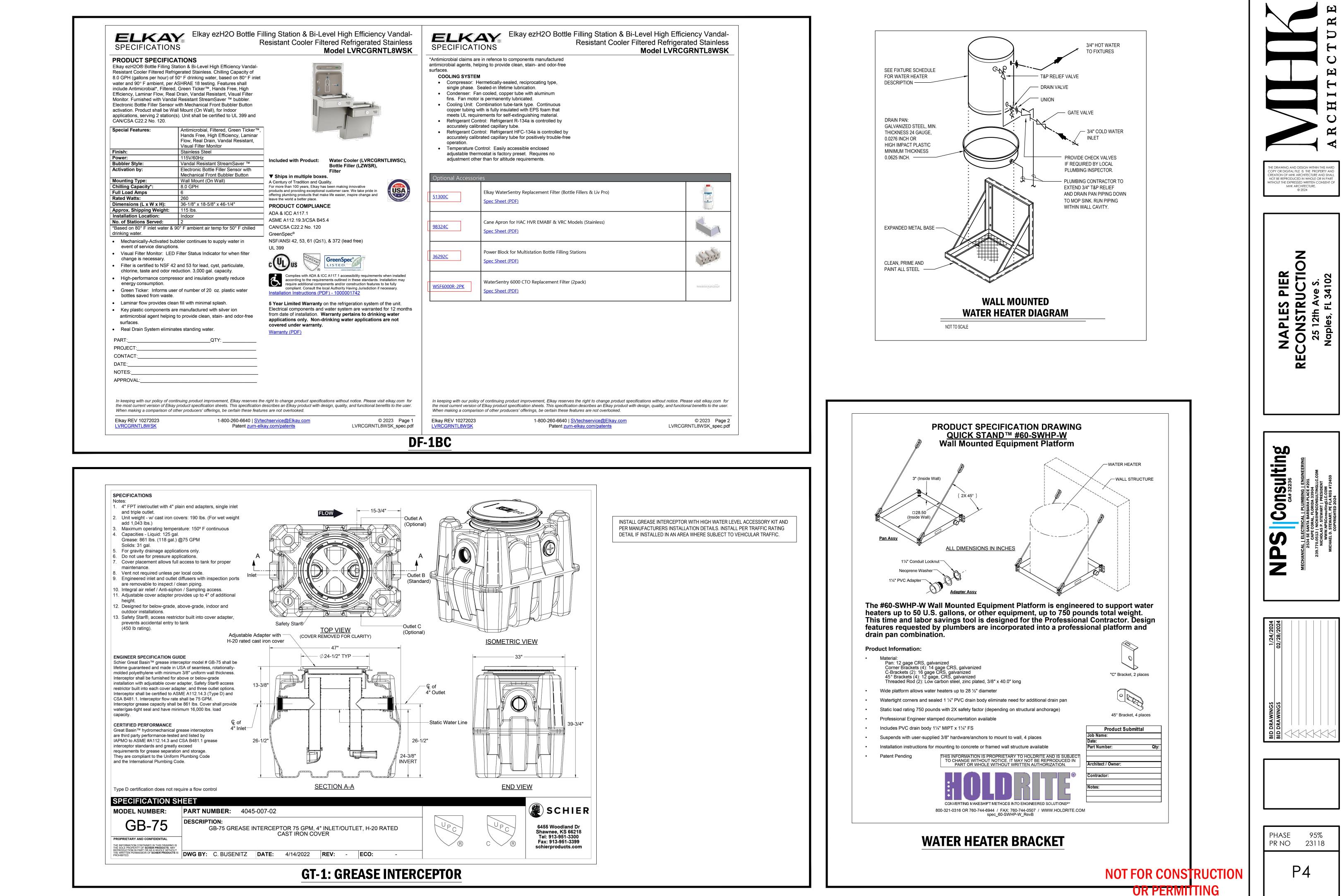
SCALE: NOT TO SCALE

-FCW

TO ICE MAKER / DRINK

DISPENSER -







CGRNTL8WSK	Patent <u>zurn-elkay.com/patents</u>	LVRCGRNTL8WS
BC		

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- 1. THE MECHANICAL CONTRACTOR SHALL COMPLY WITH INDICATED BUILDING CODES. THIS SHALL INCLUDE THE MECHANICAL CODE, ENERGY CODE, AND ALL LOCAL CODES AS MAY BE APPLICABLE. SIX SHOP DRAWING SUBMITTALS OF ALL MAJOR EQUIPMENT SHALL BE REQUIRED FOR APPROVAL PRIOR TO ORDERING AND PROCUREMENT OF SAME.
- 2. MECHANICAL PLANS ARE DIAGRAMMATIC ONLY. THEY ARE INTENDED TO INDICATE CAPACITY, SIZE, LOCATION, DIRECTION, AND GENERAL ARRANGEMENT, BUT NOT EXACT DETAILS OF CONSTRUCTION. THE FACT THAT ONLY CERTAIN FEATURES OF THE INSTALLATION ARE INDICATED MUST NOT BE TAKEN TO MEAN THAT OTHER SIMILAR OR DIFFERENT FEATURES WILL NOT BE REQUIRED. ALL RISES, DROPS, OFFSETS, & SLOPES IN PIPING AND DUCTWORK NOT NECESSARILY SHOWN.
- 3. WORK SHALL INCLUDE ALL LABOR, MATERIALS, PERMITS AND OTHER COSTS AS ARE NECESSARY FOR THE INSTALLATION OF A COMPLETE AND SATISFACTORY OPERATIONAL AIR CONDITIONING SYSTEM.
- 4. THIS CONTRACTOR SHALL COORDINATE WITH THE OTHER CONTRACTORS TO INSURE THAT EACH TRADE SHALL HAVE SUFFICIENT SPACE TO INSTALL THEIR EQUIPMENT (DUCTWORK, PIPING, ELECTRICAL, ETC.).
- 5. VERIFY ALL DIMENSIONS FROM ARCHITECTURAL PLANS OR FIELD DIMENSIONS.
- 6. UNLESS NOTED, ALL MATERIALS SHALL BE NEW, COMPLETE, INCLUDE MANUFACTURER'S WARRANTY, AND BE U.L. APPROVED IF APPLICABLE. ALL WORK SHALL PRESENT A NEAT MECHANICAL APPEARANCE WHEN COMPLETED.
- 7. CONTRACTOR SHALL FURNISH AND INSTALL CURBS AND BASES FOR ALL EQUIPMENT AS SHOWN ON PLAN. THIS CONTRACTOR SHALL CONFIRM ALL CURB REQUIREMENTS AND THEIR SIZES.
- 8. PROVIDE INSULATION FOR REFRIGERANT LINES SIMILAR TO ARMAFLEX. WEATHER-EXPOSED INSULATION TO BE PROVIDED WITH WEATHER PROOF COATING AS RECOMMENDED BY MANUFACTURER. EXPOSED CONDENSATE LINES THOSE CONCEALED IN WALLS AND CEILINGS TO BE PROVIDED WITH SAME TYPE OF INSULATION.
- 9. EQUIPMENT AS PER SCHEDULED OR PER THE LIST OF ACCEPTABLE MANUFACTURERS BELOW:
 - A/C EQUIPMENT: UPON APPROVAL ONLY A/C GRILLES: PRICE, KREUGER, TITUS FANS: GREENHECK, LOREN COOK, PENN. WALL LOUVERS: POTTORFF, PRICE, RUSKIN.
- 10. ALL EQUIPMENT AND APPLIANCES SHALL BE STARTED, TESTED, ADJUSTED AND BALANCED FOR AIR DELIVERY AS INDICATED ON THE PLANS, AND PLACED IN SATISFACTORY OPERATIONAL CONDITION BY THE MECHANICAL CONTRACTOR. THIS CONTRACTOR SHALL GUARANTEE ALL WORKMANSHIP, MATERIALS AND EQUIPMENT TO BE FREE OF DEFECTS FOR A PERIOD OF ONE YEAR FROM DATE OF CERTIFICATE OF OCCUPANCY. THIS IS IN ADDITION TO ANY WARRANTY OR GUARANTEE FROM THE EQUIPMENT MANUFACTURER. FURNISH THE OWNER WITH THE MANUFACTURER'S WRITTEN WARRANTEE CERTIFICATES.
- 11. ALL EQUIPMENT SHALL BE TESTED & BALANCED BY A NEBB CERTIFIED TEST AND BALANCE CONTRACTOR AND A COMPLETE REPORT SHALL BE PROVIDED TO THE ARCHITECT, ENGINEER, AND GENERAL CONTRACTOR. THE TEST SHALL BE DATED, INCLUDE INDOOR/OUTDOOR AMBIENT TEMPERATURES, AND SIGNED BY THE PERSON RESPONSIBLE FOR THE REPORT. THE TEST & BALANCE CONTRACTOR SHALL BE INDEPENDENT OF AND HIRED BY THE MECHANICAL CONTRACTOR. THE TEST AND BALANCE CAN NOT BE OMITTED OR VALUE ENGINEERED FOR COST SAVINGS. THE TEST & BALANCE SHALL INCLUDE ENTERING/LEAVING AIR TEMPERATURES (DB/WB), EXTERNAL / TOTAL STATIC PRESSURE, TOTAL AIR FLOW RATES ENTERING AND LEAVING EQUIPMENT, AIRFLOW RATES FOR ALL SUPPLY, RETURN, EXHAUST, INTAKE OR SIMILAR AIR MOVEMENT DEVICES. THE TEST & BALANCE SHALL LIST INITIAL & FINAL AIRFLOWS FOR ALL TESTED DEVICES.
- 12. ALL EQUIPMENT SHALL BE PROPERLY SUPPORTED AND ISOLATED TO PREVENT NOISE AND VIBRATION TRANSMISSION. ALL AIR HANDLING EQUIPMENT SHALL BE SUPPORTED WITH SPRING ISOLATORS.
- 13. ALL EQUIPMENT SHALL BE LOCATED WITH ADEQUATE CLEARANCES FOR FILTER REMOVAL, REPAIR, AND MAINTENANCE. ALL PIPING AND DUCTWORK SHALL BE INSTALLED TO PROVIDE ADEQUATE CLEARANCE FOR ACCESS TO ALL EQUIPMENT.
- 14. ALL EQUIPMENT SHALL BE MOUNTED AND SECURED TO WITH-STAND HURRICANE WIND CODE.
- 15. PROVIDE FLEXIBLE DUCT CONNECTIONS FOR SHEET METAL DUCTS FOR ALL AIR HANDLING UNITS AND EXHAUST FANS.
- 16. ALL CONTROL AND LOW VOLTAGE WIRING BY MECHANICAL CONTRACTOR.
- 17. DUCT DIMENSIONS SHOWN ON DRAWINGS ARE CLEAR INSIDE DIMENSIONS. IN GENERAL, ALL PIPING AND DUCTWORK SHALL BE RUN CONCEALED IN CEILING AND PIPE SPACES PROVIDED UNLESS NOTED OR INDICATED OTHERWISE. ROUTING SHALL BE COORDINATED WITH TRUSS SHOP DRAWINGS. DO NOT INSTALL ANY DUCTWORK OR PIPING OF ANY KIND ABOVE ELECTRICAL PANEL.
- 18. ALL DUCTWORK, INSTALLATION AND EQUIPMENT SHALL MEET SMACNA AND ENERGY CODE REQUIREMENTS.
- 19. RIGID FIBERGLASS DUCTWORK SHALL BE EQUAL TO MANVILLE "SUPERDUCT", R-6 DUCT FOR DUCTWORK IN NON/INDIRECTLY-CONDITIONED SPACES OR R-8 FOR ATTIC SPACE AND SHALL HAVE ACRYLIC POLYMER AIRSTREAM SURFACE COATING TO INHIBIT BIOLOGICAL GROWTH. DUCT SHALL BE REINFORCED AND FABRICATED PER LATEST EDITION SMACNA FIBROUS GLASS DUCT CONSTRUCTION STANDARDS. ALL JOINTS SHALL BE ASSEMBLED SHIP-LAPPED USING STAPLES AND TAPE WITH FISSION 0810 DUCT TAPE WITH UL181B-FX RATING PROVIDING A LEAK PROOF JUNCTURE.
- 20. DUCTWORK INDICATED AS "SPIRAL DUCT' SERVING SUPPLY & RETURN AIR SYSTEMS SHALL BE DOUBLE WALL INSULATED DUCT. SPIRAL DUCT SERVING EXHAUST DUCT SYSTEMS SHALL BE SINGLE WALL. THIS NOTE DOES NOT APPLY IF SPIRAL DUCTWORK HAS NOT BEEN INDICATED ON THE MECHANICAL OR ARCHITECTURAL DRAWINGS.
- 21. INSULATED DUCTWORK SHALL BE USED FOR PRE-CONDITIONED OUTSIDE AIR DUCTS AND AIR PLENUMS AND DROPS FROM ROOFTOP UNITS SHALL BE GALVANIZED SHEET METAL DUCT IN ACCORDANCE WITH MECHANICAL CODE SECTION 603 AND HAVE EXTERIOR DUCT INSULATION.
- 22. FLEXIBLE DUCTWORK, WHERE SHOWN ON THE DRAWINGS, SHALL BE EQUAL TO FLEXAIRE WITH WIRE HELIX FRAME, R-8 INSULATION FOR DUCTWORK WITHIN ATTIC SPACES OR R-6 FOR FLEXIBLE DUCTWORK WITHIN CONDITIONED OR INDIRECTLY CONDITIONED SPACES, PROVIDED WITH POLYESTER LINER, HIGH DENSITY FIBERGLASS INSULATION AND METALIZED REINFORCED VAPOR BARRIER EXTERIOR COVERS. PROVIDE SPIN-IN FITTINGS WITH SCOOP OR BELL MOUTH TYPE FITTINGS WITH ADJUSTABLE DAMPERS. DUCT SHALL BE PROPERLY SUPPORTED WITH GALVANIZED STEEL STRAPS 2" WIDE AND SHALL BE RUN AS STRAIGHT AS POSSIBLE WITH NO KINKS OR BENDS TO RESTRICT AIRFLOW.
- 23. NON-CONDITIONED OUTSIDE AIR AND TOILET EXHAUST DUCTWORK SHALL BE SHEET METAL. ALUMINUM FLEXIBLE PIPE ACCEPTABLE FOR SHORT EXHAUST DUCTS AND FINAL CONNECTIONS (LESS THEN 8'). DUCT TOILET EXHAUST TO ROOF, SOFFIT, OR WALL CAPS AS SHOWN ON PLANS. CAPS SHALL BE ALUMINUM CONSTRUCTION WITH AND INSECT SCREENS.
- 24. HVAC SUPPLY DIFFUSERS AND RETURN GRILLES SHALL BE WHITE FINISH, ALUMINUM CONSTRUCTION UNLESS OTHERWISE NOTED. FINAL COLOR SELECTED BY OWNER. SEE PLANS FOR THROAT CONNECTION SIZES.
- 25. WALL MOUNTED THERMOSTAT(S) SHALL BE INSTALLED 4'-0" ABOVE FINISHED FLOOR UNLESS OTHERWISE INDICATED.
- 26. PROGRAMMABLE THERMOSTAT CONTROL FOR COOLING, HEATING. FAN, AUTO AND MANUAL MODE WHEN SPECIFIED ON FLOOR PLANS.
- 27. PROVIDE AIR HANDLING UNITS WITH DUCT MOUNTED SMOKE DETECTOR IN THE SUPPLY DUCT FOR ANY UNIT 2000 CFM AND GREATER. THE DUCT SMOKE DETECTOR SHALL BE PROVIDED WITH A KEYED INSPECTORS TEST STATION INSTALLED NEAR THE HVAC SYSTEM, OR, SHALL BE CONNECTED TO THE BUILDING'S FACP SYSTEM IF PRESENT.
- 28. ALL AIR HANDLERS SHALL BE PROVIDED WITH GALVANIZED DRAIN PAN INSTALLED UNDER SYSTEM REGARDLESS OF LOCATION.
- 29. ALL PACKAGED DOWN FLOW UNITS SHALL BE PROVIDED WATER LEVEL MONITORING DEVICE.
- 30. ALL SUPPLY AIR GRILLS TO BE PROVIDED WITH MANUAL VOLUME DAMPER. PROVIDE OPPOSED BLADE DAMPER OR CABLE OPERATED DAMPER FOR NON-ACCESSIBLE MANUAL VOLUME DAMPERS (NO EXCEPTIONS). RETURN AIR GRILLS CONNECTED TO RETURN DUCTS THAT SERVE INDIVIDUAL SPACES SHALL BE PROVIDED WITH AN ACCESSIBLE MANUAL VOLUME DAMPER, OPPOSED BLADE DAMPER, OR CABLE OPERATED DAMPER.
- 31. IF THE CEILING SPACE OR HVAC CLOSETS IN THIS PROJECT WILL BE USED AS A RETURN AIR PLENUM THEN ALL MATERIALS AND COMPONENTS LOCATED ABOVE CEILING SPACE OR CLOSET (WITHIN RETURN AIR PLENUM) SHALL BE APPROVED FOR PLENUM USE (OR) SHALL BE WRAPPED WITH A UL LISTED AND APPROVED PLENUM WRAP AND INSTALLED PER MANUFACTURER'S INSTRUCTIONS. MATERIALS AND WRAPS SHALL MEET THE FLAME SPREAD INDEX OF NOT MORE THEN 25 AND A SMOKE DEVELOPED INDEX OF NOT MORE THAN 50 WHEN TESTED IN ACCORDANCE WITH ASTM E 84 OR UL 723. THIS NOTE SHALL APPLY TO ALL ITEMS LOCATED WITHIN THE RETURN AIR PLENUM SPACE WHETHER THEY ARE NEW OR EXISTING. ENTIRE PLENUM SPACE SHALL COMPLY WITH THE INDICATED BUILDING CODES & STANDARDS. THIS NOTE SHALL SUPERCEDE ALL OTHER NOTES LOCATED ON THESE DRAWINGS OR OTHER DRAWINGS INCLUDED FOR THIS PERMIT.
- 32. ALL FIRE WALL PENETRATIONS WITH DUCTWORK SHALL BE PROTECTED WITH A UL LISTED FIRE DAMPER. NOT ALL FIRE DAMPERS HAVE BEEN INDICATED ON THESE DRAWINGS - REFER TO ARCHITECTURAL DRAWINGS FOR RESPECTIVE UL DETAILS AND FIRE WALL RATINGS. DUCTWORK PENETRATING FIRE WALLS THAT MEET EXCEPTIONS WITHIN THE MECHANICAL CODE TO PENETRATE FIRE WALLS WITHOUT A FIRE DAMPER SHALL BE PROVIDED WITH ANGLES AND SLEEVES TO PENETRATE FIRE WALLS IN ORDER TO MEET THE EXCEPTIONS WITHIN THE MECHANICAL CODE / NFPA90A.

MARK		BASIS OF DE			
	LOCATION	MANUFACTURER			
ACR-1	SEE PLAN	POWERED AIR			
ACR-2	SEE PLAN	POWERED AIR			

MULTI-SPLIT SYSTEM FCU S
SYSTEM DESIGNATION TAG
SERVES
MANUFACTURER
MODEL
FCU STYLE
DUTY
NOMINAL CAPACITY
TOTAL AIR QUANTITY - COOLING (H / M / L / SL)
EXTERNAL STATIC PRESSURE
DIMENSIONS
WEIGHT
NOTES
1. BASIS OF DESIGN: DAIKIN RA SPLIT SYSTEM

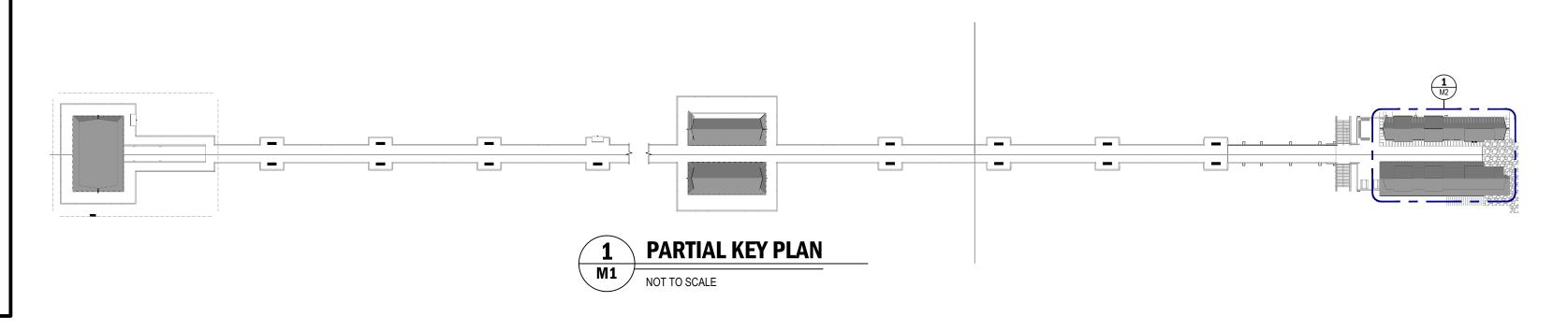
- 2. MATCH SCHEDULED SEER / EER RATING LISTED IN SCHEDULE
- 3. FAN COIL POWER IS PROVIDED BY THE CONDENSING UNIT. 4. PROVIDE A DAIKIN ONE-LITE THERMOSTAT MN: DTST-LTE-LA-A
- 5. PROVIDE A CONDENSATE PUMP MN: DACA-CP1-1
- 7. PROVIDE WITH REFRIGERANT BALL VALVES FOR REPLACEMENT

MULTI-SPLIT SYSTEM CU SCHEDULE ODU TAG SYSTEM DESIGNATION TAG MSCU-1 IDU TAG NAME DAIKIN 5MXS48WVJU9 NO TYPE 5-PORT MULTI-SPLIT TYPE HEAT PUMP BTUH 47,000 48,500 BTUH SEER2 / EER2 / HSPF2 20.6 / 10.5 / 9.3 SEER2 / EER2 / HSPF2 14.5 / 8.2 / 7.8 SEER2 / EER2 / HSPF2 17.55 / 9.35 / 8.6 210722663 # 210725099 210800987 # TYPF INVERTER V / PH / HZ 208-230 / 1 / 60 AMPS 30.8 35.0 AMPS 268.0 49.3 FT 98.0 O.D. IN INCHES x QTY 3/8 x 1, 1/2 x 2, 5/8 x 2 O.D. IN INCHES x QTY 1/4 x 5 53 / 55 Db(A 34-1/4 x 43-5/16 x 18-1/8 HxWxD

SERVES
MANUFACTURER
MODEL
FAMILY
DUTY
RATED COOLING CAPACITY
RATED HEATING CAPACITY
EFFICIENCY (NON-DUCTED)
EFFICIENCY (MIXED)
EFFICIENCY (DUCTED)
AHRI (NON-DUCTED)
AHRI (MIXED)
AHRI (DUCTED)
COMPRESSOR
ELECTRICAL SERVICE
MINIMUM CIRCUIT AMPACITY
RECOMMENDED FUSE SIZE
PIPING
MAX PIPE LENGTH
MAX PIPE LENGTH (VERTICAL)
MAX HT DIFF (IDU TO IDU)
GAS CONNECTION
LIQUID CONNECTION
SOUND PRESSURE (COOLING/HEATING)
DIMENSIONS
WEIGHT
DTES
J NOTES
PROVIDE A LOW AMBIENT WIND BAFFLE/AIR ADJUST
PROVIDE WITH SEACOAST SPRAY PROTECTION, 5000

OVIDE WITH SEACOAST SPRAY PROTECTION, 5000 SALT SPRAY PER ASTM B117 PROVIDE A POWDER COATED WALL MOUNTED BRACKET MN: DACA-WB-3

	LOUVER SCHEDULE									
	MANUFACTURER		HOUSING	PERFORM	PERFORMANCE		THROAT			
MARK	MODEL	APPLICATION	STYLE	MAX CFM	IN.WC	SIZE (WxL)	FREE AREA (SQ.FT / %)	VELOCITY (FPM)	DAMPER	NOTES
L-1	RUSKIN EME3625MD	INTAKE	ALUMINUM	1500	0.13	34" X 18"	1.66 / 40%	906 FPM	MOTORIZED	
L-2	RUSKIN ELF637DXD	EXHAUST	ALUMINUM	3500	0.07	34" X 34"	5.21 / 65%	672 FPM	MOTORIZED	
L-3	RUSKIN ELF637DXD	INTAKE	ALUMINUM	3500	0.07	34" X 34"	5.21 / 65%	672 FPM	MOTORIZED	



	AIR CURTAIN SCHEDULE									
GN	PERFORMANCE MOTOR									
NODEL.NO	(FEET)	CFM	AIR VELOCITY (FPM)	NUMBER OF MOTORS	HP (PER MOTOR)	VOLTAGE	HEAT (kW)	CONTROL	NOTES	
MP-1-42	42"	1243	1462	1	1/5	120/1	NONE	MAGNETIC DOOR		
MP-2-72	72"	1968	1348	2	1/5	120/1	NONE	MAGNETIC DOOR		

SCHEDUL	.E			
	IDU TAG	MSA-1.1	MSA-1.2	MSA-1.3
	ODU TAG			
	NAME	DAIKIN	DAIKIN	DAIKIN
	NO.	FFQ18W2VJU9	FFQ18W2VJU9	FFQ18W2VJU9
	TYPE	2x2 CEILING CASSETTE	2x2 CEILING CASSETTE	2x2 CEILING CASSETTE
	TYPE	HEAT PUMP	HEAT PUMP	HEAT PUMP
	BTUH	18,000	18,000	18,000
	CFM / CFM / CFM	448 / 378 / 275 / NA	448 / 378 / 275 / NA	448 / 378 / 275 / NA
	IN. H2O	-	-	-
	H x W x D	10-1/4 x 22-5/8 x 22-5/8	10-1/4 x 22-5/8 x 22-5/8	10-1/4 x 22-5/8 x 22-5/8
	LBS.	39.0	39.0	39.0
		ALL	ALL	ALL

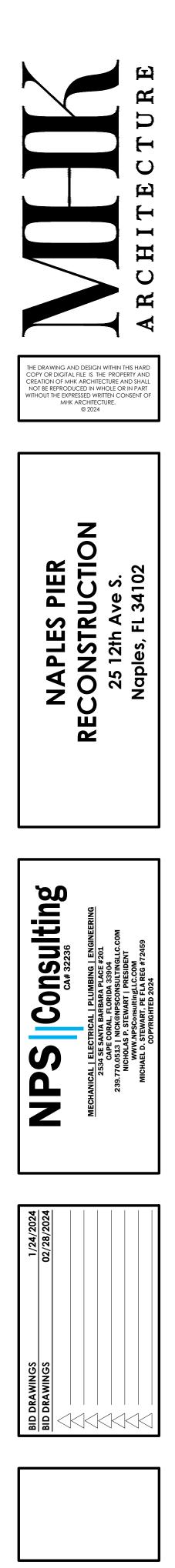
6. PROVIDE A 5-YEAR LIMITED PARTS WARRANTY. ONLINE REGISTRATION REQUIRED WITHIN 60 DAYS OF INSTALLATION.

CODE COMPLIANCE STATEMENT

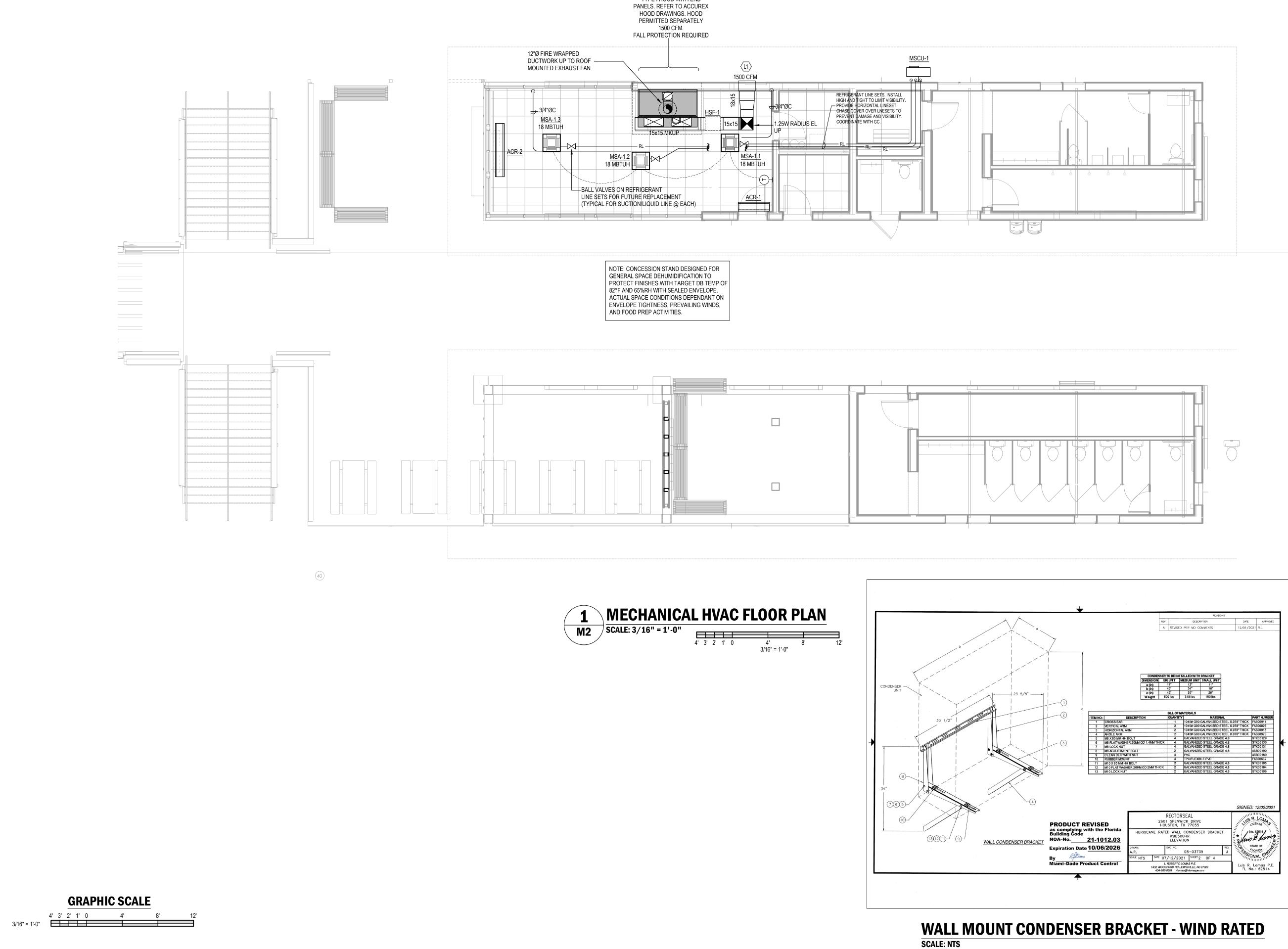
ENTIRE INSTALLATION SHALL COMPLY WITH CODES BELOW, IN ADDITION TO ALL REFERENCED STANDARDS OR ANY OTHER LOCALLY ADOPTED AMENDMENTS.

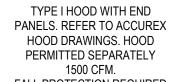
FLORIDA BUILDING CODE: FLORIDA ENERGY CODE: FLORIDA FIRE CODE: FLORIDA FUEL GAS CODE: FLORIDA MECHANICAL CODE FLORIDA PLUMBING CODE NFPA 101 LIFE SAFETY CODE NATIONAL ELECTRICAL CODE 2023 EDITION 2020 EDITION

TMENT GRILLE



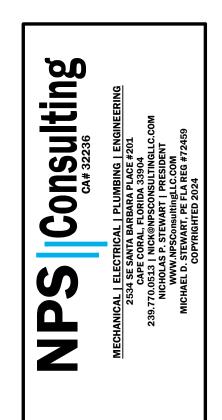
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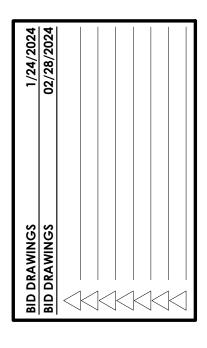


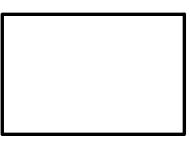






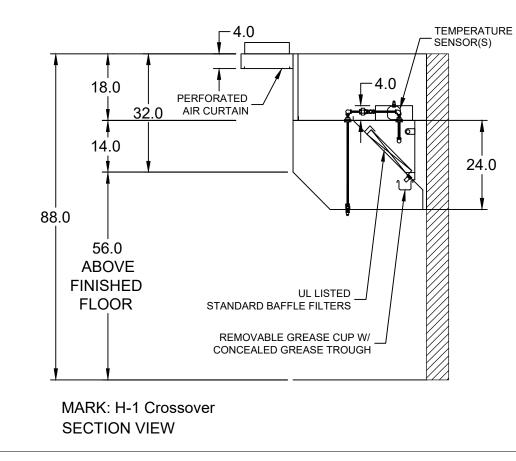




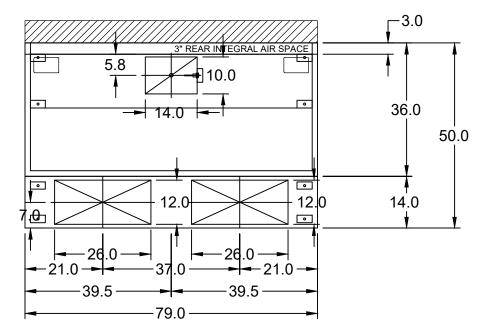


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\wedge	12	

290 2 FP / 2 FP / 79.0 in. LENGTH **---1.0 BACKSPLASH PANEL** Fue 30" W Type: ′ X 36" H : Electric Griddle MARK: H-1 Crossover - SECTION 1 ELEVATION VIEW



MARK: H-1 Crossover - SECTION 1 PLAN VIEW



HOOD SUPPRESSION TANK - INCLUDED - 6 GAL. - [(2) 3.0 TANK(S)] REMOTE PULL STATION - STANDARD - FIELD INSTALLATION AT SINGLE POINT OF EGRESS

MODEL

XBEC-79-S

METAL BLOW-OFF CAPS - INCLUDED GAS VALVE - INCLUDED - MECHANICAL SHUTOFF VALVE, 2", (ANSUL) - PART# ANSULMECHSHUTOFFVALVE200

CHROME SLEEVES FOR FACTORY PROVIDED APPLIANCES DROPS - INCLUDED

FIRE SYSTEM OPTIONS AND ACCESSORIES FULL INSTALLATION (INCLUDES PRE-PIPED HOOD(S) WITH DETECTION AND FACTORY COORDINATED INSTALL)

1	H-1 CROSSOVER							BAFFLE		· · ·	10	16		
I	IT I OROGOVER							STAINLESS ST	TEEL	3	20		WALL	
SUPPLY	PLENUM INFORMATION													
HOOD		DOC		SI	ZE (I	N.)	INSULATED		LE	ED LIG	HT(S	;)	TOTAL	TOT
NO.	MARK	POS.	TYPE	L	W	н		UAIVIPER(3)	SUPF	PLIED	Q	ΤY	CFM	S.P
1	H-1 CROSSOVER	FRONT	ASP	79	14	4	NO	YES	N	0			1185	0.02
FIRE SYS	STEM INFORMATION													
FIRE SYS	STEM INFORMATION							FLC	OW PC	DINTS			SUPPLY	
FIRE SYS	STEM INFORMATION MARK	MODEL			LOC	CATION	 I	FLC HOODS			CU		SUPPLY	D

HOOD DIMENSIONS (IN.)

LENGTHWIDTHHEIGHT

79

LIGHTING DETAILS

FIXTURE TYPE

BULB / LAMP INFO

COOKIN

LOAD /

TYPE / MODEL

MATERIAL

BAFFLE

RATING CFM

GREASE FILTRATION DETAILS

TOTAL

HOOD

TOP 36FRT 14 430 SS WHERE MEDIUM 1481

BOT 26BACK 24 EXPOSED

QTY CANDLES

FOOT

CONSTR. DUTY

EXHAUST

14

CFM WIDTHLENGTH DIA.

QTY SIZE (IN.) L H

10

16

COLLAR(

FIRE SYSTEM MARK: FS-1

PLAN VIEW

HOOD INFORMATION

HOOD INFORMATION

MARK

H-1 CROSSOVER

MARK

HOOD

NO.

1

HOOD

NO.

				SU	IPPL	Y		Т	OTAL	0	OTION		
R(S)		1	MUA		AC		WEIGHT					CTION CATION
	CFM	S.P.	1	CFM	I CFM LBS.		BS.	LOC	JAHON				
	1481	0.503		1185					158	01	NGLE		
				1100					100	5	NGLE		
		UTILITY	CA	BINE	T(S)								
	FIRE S	YSTEM					С	ON	TROLS	3			
	TYPE	SI	SIZE		DEL	-		INTE	RFA	CE			
Α	NSUL R1	02	6	6									
DTA				COLL	AR								
5.P.	TYPE N	IOUNTIN	IG¢	ΣΥ	W	LD	IA.		CFM		VEL.		
0.02	MUAFA	CTORY		2	122	6			593		274		
	ETECTIO				M	ARK	(S)) PF	ROTEC	TED) BY FIF		
							(-)						
US	IBLE LIN	< —					H-1	I CF	ROSSC	DVE	R SECT		
50		`											

18 IN HIGH CEILING ENCLOSURES - FRONT LEFT RIGHT - FIELD INSTALLED FACTORY MOUNTED EXHAUST COLLAR(S) WALL UTILITY CABINET 24 IN HIGH 36 IN LONG 12 IN WIDE HOOD FRONT IS TAPERED (FOR LOW CEILING APPLICATIONS) BACKSPLASH 46.00 IN HIGH 79.00 IN LONG PERFORMANCE ENHANCING LIP (PEL) TECHNOLOGY

ANSUL R102 (WET CHEMICAL) FIRE PROTECTION SYSTEM - MODEL FSSC

WIRING DIAGRAMS W/DPDT MICRO SWITCH

DPDT SWITCHES PROVIDED BY MANUFACTURER MAY BE

WRED PER TYPICAL EXAMPLES SHOWN. VERIFY WITH LOCAL CODES AND EQUIPMENT SUPPLIED AS THE CONNECTION NEEDED FOR YOUR INSTALLATION.

CONNECTION TO BUILDINGS ALARM

CONNECTION TO COOKING

EQUIPMENT SHUT DOWN

120 VAC INPUT

CONNECTION TO FAN SHUT DOWN

DENOTES FIELD INSTALLATION.
DENOTES FACTORY INSTALLATION.

3. DO NOT USE BLACK WIRE ON SNAP-ACTION SWITCH IN

NORMAL INSTALLATION. BLACK WIRE TO BE USED ONLY FOR EXTRANEOUS ALARM, LIGHT CIRCUITS, ETC.

DO NOT SHUT DOWN EXHAUST FANS WITH THIS METHOD OF WIRING, IF PROHIBITED BY LOCAL CODES.

NOTES:

POWER TO COOKING EQUIPMENT

VOLTAGE FREE CONTACTS FOR BUILDING ALARM(S

SHUNT TRIP BREAKER

POWER TO FAN(S)

MANUAL SWITCH

SEE OPTION A OR B AT RIGHT, MECHANICAL G SHUT OFF VALVE DOES NOT REQUIRE

STANDING SEAM CONSTRUCTION FOR SUPERIOR STRENGTH

UL 710 LISTED W/ OUT EXHAUST FIRE DAMPER - UL #R25625

BACK INTEGRAL AIR SPACE - 3 IN WIDE

CONTROL PANEL

5. KNOCKOUT FOR WIRING MICROSWITCH

NOT TO SCALE

NOTES:

WET CHEMICAL FIRE PROTECTION SYSTEM TO BE ANSUL R-102, DESIGNED IN

-VERIFICATION OF ALL COOKING EQUIPMENT MAKE, MODEL AND LOCATION

-ALL FIRE SYSTEM PIPING IS STANDARDLY TO THE RIGHT END OF THE HOOD

THE BASIC FIRE SYSTEM WILL INCLUDE THE FOLLOWING: -GAS SHUT-OFF VALVE, IF REQUIRED, TO BE SUPPLIED BY MANUFACTURER (UP TO 2" DIAMETER AS STANDARD), AND INSTALLED BY A LICENSED PLUMBER.

AND ELECTRICAL POWER SHUT DOWN. FIELD WIRING AND CONNECTIONS TO BE

-FULL DUMP TEST OTHER THAN WHT IS SPECIFIED PER THE INSTALLATION MANUAL, OR TO SATISFY A STATE OR LOCAL CODE. PERMIT AND TESTING FEES ARE NOT INCLUDED UNLESS NOTED UNDER THE EQUIPMENT SCHEDULE FOR THE FIRE SYSTEM. -MORE THEN TWO TRIPS TO THE JOBSITE OR SPECIAL TRANSPORTATION, OR

OVERNIGHT LODGING REQUIREMENTS IN REMOTE AREAS. NORMAL TRAVEL

-SPECIAL DRAWINGS REQUIRED TO SATISFY STATE OR LOCAL CODE. PLAN EXAMINATION FEES, PE OR FS APPROVAL STAMP.

-UNION LABOR, GOVERNMENT LABOR, OR PREVAILING WAGES REQUIRED FOR

-ANY AND ALL ELECTRICAL COMPONENTS/CONNECTIONS REQUIRED TO SHUT DOWN FANS, SHUT OFF DEVICE FOR ELECTRIC COOKING EQUIPMENT (SHUNT

-ANY DISMANTLING OR REASSEMBLY REQUIRED TO GAIN ACCESS TO THE FIRE SUPPRESSION PIPING LOCATED ON THE TOP OF THE HOOD. -ROUGH-IN HIDDEN CONDUIT FOR REMOTE PULL STATION OR GAS VALVE

-INSTALLATION OF MORE THAN (1) REMOTE PULL STATIONS OR DISTANCES GREATER THAN 20 FT (6.1M.)

EQUIPMENT CHANGES OR DEVIATION FROM PLANS. OR ANY CHARGES FOR

MISSING OR ADDITIONAL PARTS OTHER THEN THOSE INDICATED ON THE FIRE

-PARTS OR LABOR REQUIRED TO CORRECT PIPING DUE TO COOKING

- SPECIAL CLASSES OR ADDITIONAL LABOR FOR ACCESS TO SECURITY

-MICRO SWITCH TO BE SUPPLIED BY MANUFACTURER FOR CONNECTION TO, BUT NOT LIMITED TO, BUILDING ALARM SYSTEM(S), EXHAUST AND SUPPLY FANS

-ANSUL AUTOMAN RELEASE TO BE LOCATED WITHIN 60" OF HOOD.

THE BASIC FIRE SYSTEM DOES NOT INCLUDE THE FOLLOWING:

7.5

16.5

1. STAINLESS STEEL ENCLOSURE 2. AGENT STORAGE TANK 3. EXPELLENT GAS CARTRIDGE

ANSUL AUTOMAN RELEASE

COMPLIANCE WITH UL 300 REQUIREMENTS.

PERFORMED BY A LICENSED ELECTRICIAN.

DISTANCE IS FIRST 50 MI. (80.5 KM) FROM OFFICE.

TRIP BREAKER), OR ACTIVATE AN ALARM SYSTEM, ETC.

-INSTALLATION OF GAS SHUT-OFF VALVE.

SENSITIVE AREAS.

FINAL FIELD HOOK-UP.

SUPPRESSION DETAIL.

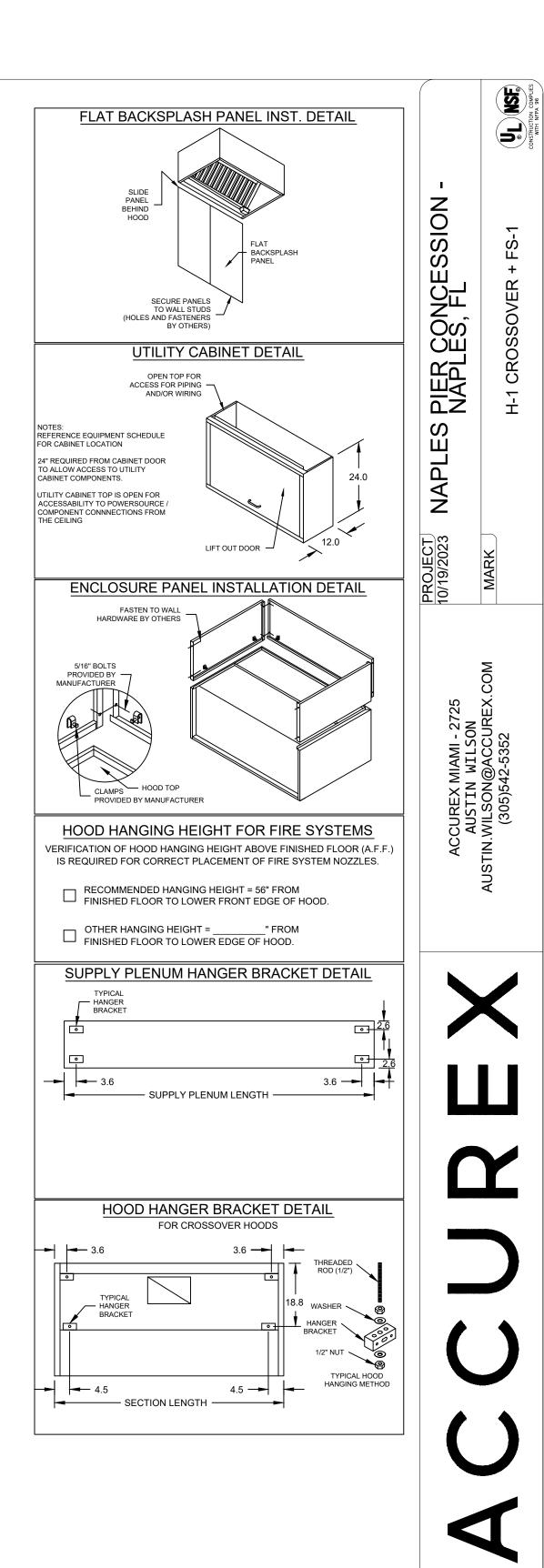
24-011 Naples Pier Reconstruction - ITB

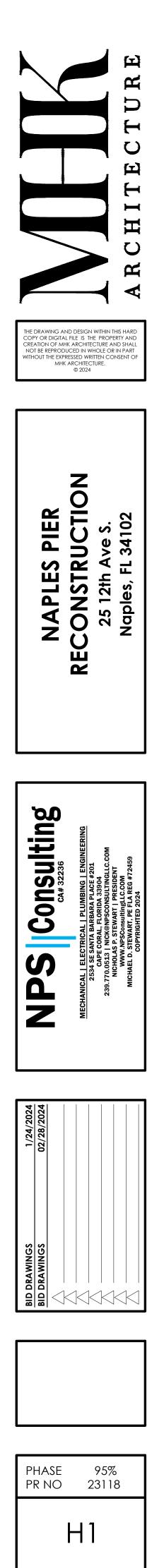
(FLUSH MOUNTED PULL STATION).

REQUIRED FOR ALL FIRE PROTECTION SYSTEMS.

UNLESS A WALL IS LOCATED ON THE RIGHT END.

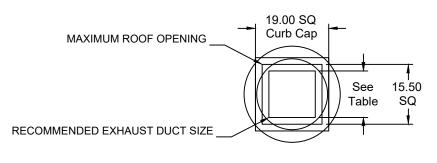
HOOD OPTIONS

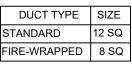


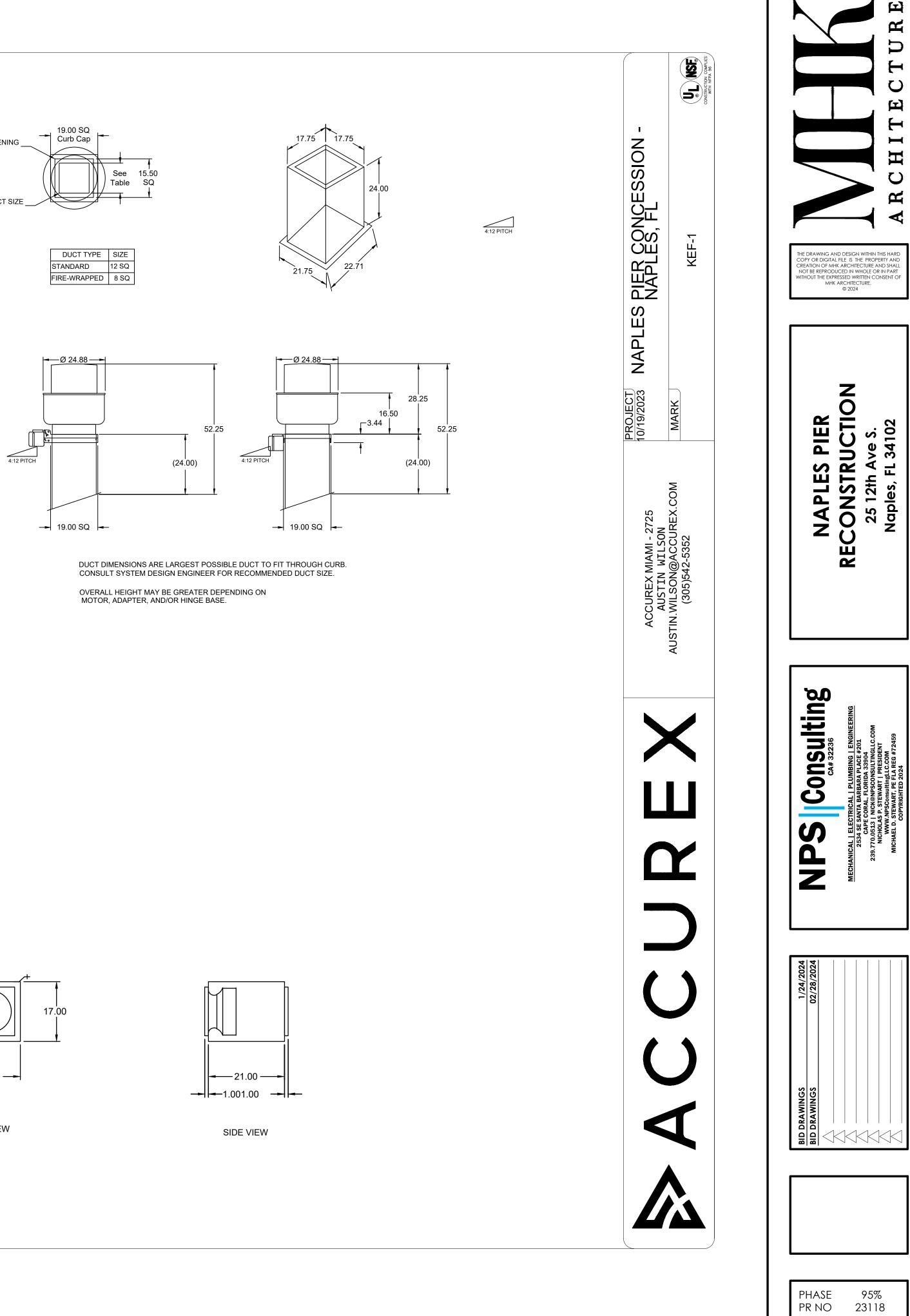


Direct Drive Centrifugal Infine Fan FAN INFORMATION FAN INFORMATION OTY MARK INFORMATION POWER (HP) ILL ILR31 1.003 ILR371 0.43 6 1 KEF-1 XCOUE120-VG 202.00 Actual modor FLA may vary for sizing thermal overload. consult factory 0 repiece hully welded windband KEF-1: SELECTED OPTIONS AND ACCESSORIES ILR31 1.003 1.11571 0.43 6 0 repiece hully welded windband Taperdo bulling world nub KEF-1: SELECTED OPTIONS AND ACCESSORIES ILR31 0.03 0.00 0
Image: Child Processing State Child Processing State Child Processing State Child Processing State Consult Child Processing State <thconsult child="" processing="" state<="" t<="" th=""></thconsult>
Direct Drive Centrifugal Inline Fan MARK INFORMATION Frager During Hall Mark Model Tyr MARK MODEL Conduit Chase Oty 1
INFERT I: SELECTED OPTIONS AND ACCESSORIES One piece fully welled windband Tapered busing wheel hub Image: Second
Dire picer hilly welded windband Tapered bushing wheel hub Dereating tube cullet area min. 4.4 eq. in. (sizes 99-480), 2.0 sq. in. (sizes 60-95) Breather tube cullet area min. 4.4 eq. in. (sizes 99-480), 2.0 sq. in. (sizes 60-95) Direct Dirive Cullet area min. 4.4 eq. in. (sizes 99-480), 2.0 sq. in. (sizes 60-95) Standard Cuth Cap Size - 19 Square ULCUL 705 Listed - Supplements Co-9000 Switch, NEMA-38, Toggle. High Wind Raude - Supplements Co-790000 Ventilators for Restaurant Exh. Appliances" (Formerly UL 762) Switch, NEMA-38, Toggle. High Wind Raude - Supplements Co-Ontinuous Duty at 1500 F (Factory Attached) Graze Trap (PN 475538) Conduit Chase Qiy 1
MARK INFORMATION FAN INFORMATION QTY MARK MODEL VOLUME (CFM) TOTAL EXTERNAL SP (IN WG) FAN POWER (HP) OPERATING POWER (HP) WE (I 1 KSF-1 Inline XID-100-VG 1,185 0.32 1,584 0.19 *NEC FLA - Based on table 430.250 or 430.248 of National Electrical Code 2020. Actual motor FLA may vary for sizing thermal overload, consult factor KSF-1 Inline : SELECTED OPTIONS AND ACCESSORIES UL/cUL 705 Listed - "Power Ventilators" Junction Box Mounted and Wired Switch, NEMA-3R, Toggle, Shipped with Unit, Aluminum Wheel Material Fan: Neoprene Hanging Isolator PN: 855837, Incl. 4 isolators and 4 brackets Vertice FAN INFORMATION
KSF-1 Inline : SELECTED OPTIONS AND ACCESSORIES UL/cUL 705 Listed - "Power Ventilators" Junction Box Mounted and Wired Switch, NEMA-3R, Toggle, Shipped with Unit, Aluminum Wheel Material Fan: Neoprene Hanging Isolator PN: 855837, Incl. 4 isolators and 4 brackets

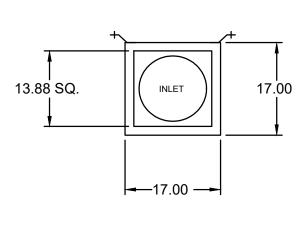
		MOTOR INFORMATION									
SHT8 .)	SIZE (HP)	V/C/P	ENCLOSURE	MOTOR RPM	WINDINGSI	NEC FLA*					
6	0.5	230/60/1	OP	1725	1	4.9					



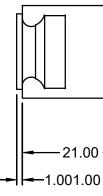




		MOTOR INFORMATION										
IGHTS B.)	SIZE (HP)	V/C/P	ENCLOSURE	MOTOR RPM	WINDINGSI	NEC FLA*						
58	0.25	230/60/1	TN	1725	1	2.9						







AIRFLOW

----20.75 **---**

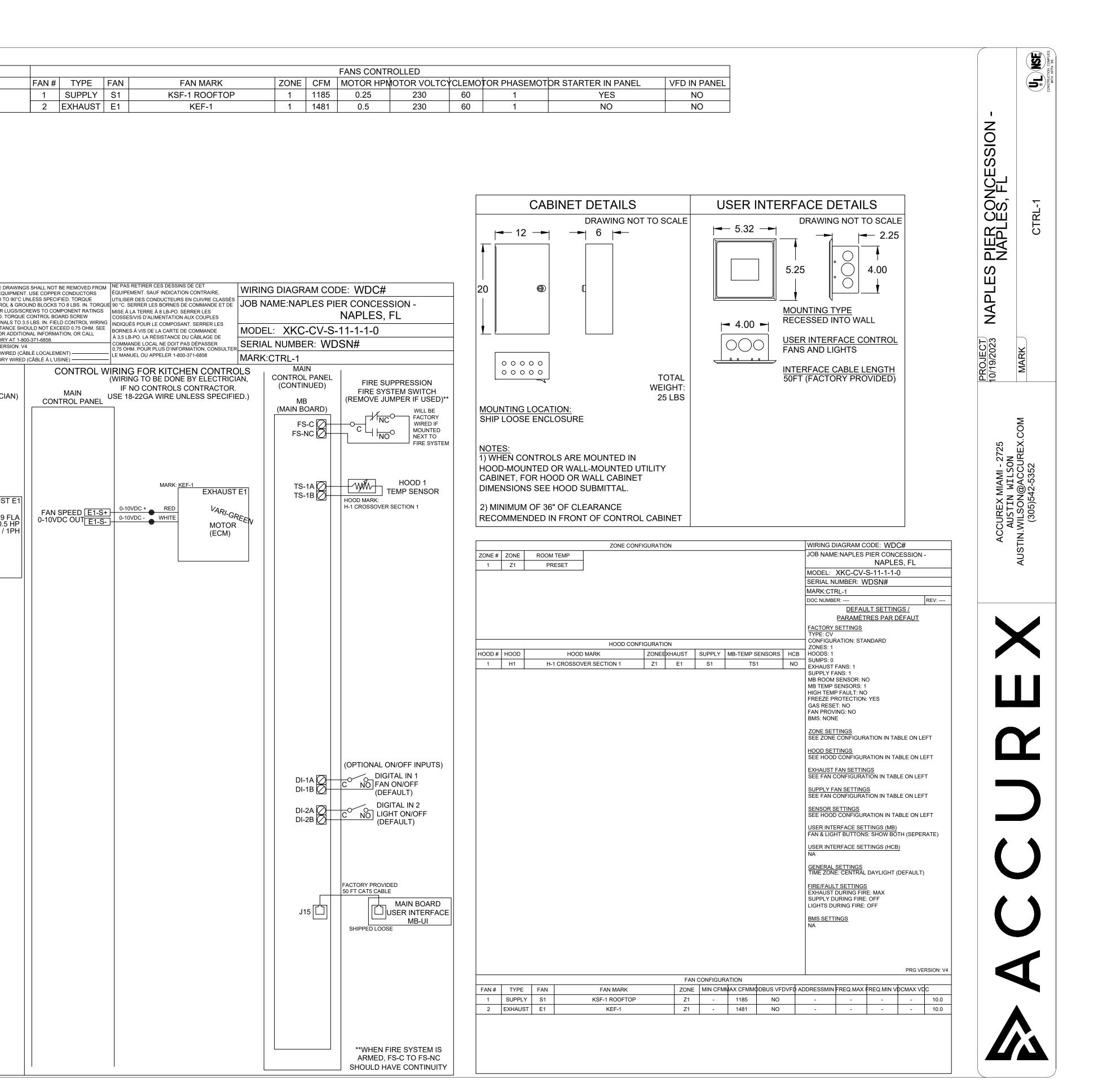
AIRFLOW

18.63

NOT FOR CONSTRUCTION OR PERMITTING

H2

<u>NTROL INFORM</u> MAF				ELECTRICA ODEL			KAGE	TYPE	l	JSER INTE	ERFACE LOCATION	
CTR	L-1			/-S-11-1-1-()		DSE ENCLOSUR				SHIP LOOS	
ITROL FEATUR DOD LIGHT COI MP SENSORS RY FIRE CONTA GHTS OFF DUR (HAUST MAX D JPPLY OFF DUI	NTROL (FACTOF ACTS - Q ⁻ ING FIRE URING F	ΓΥ. 1 Ξ IRE	.ED) - QTY.	1								
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	4 (CC	U	R	E	X	UNIT MUST BE GRO WITH N.E.C. POW SE	UTION DUNDED IN ACCORDANCE ER MUST BE OFF WHILE RVICING. COMMERCIA ELECTRICAL RAT	CONFOR DOIT	RMÉMENT AU CO ÊTRE COUPÉE D ANCE OUTL 0-240V,1PHA	RE MIS À LA TERRE DE C.E. L'ALIMENTATI URANT L'ENTRETIEN. ET CENTER ASE, 50-60HZ,15	IOM F
			VIRING FO				LISTED 43BI	- i	OWER		#E313951 FROM BREA	
		X				,		BUILDIN BREAKER F	IG (V		BE DONE BY EL	
BUILDING REAKER PANEL 110V-120V / 1PH POWER FOR CONTROLS / LIGHTS (NON SHUNTED 15A BREAKER)	HOT NEUTRAL GROUND	CC 	MAIN ONTROL PAN	EL <u>LTS-H</u> <u>LTS-N</u> <u>GND</u>	BLACK WHITE GREEN		HOOD LIGHTS 115VAC 1200W MAX					
		CTON	UPON FIF VER TO PANE IO WILL CLOS NC WILL OPI	EL: <u>C1</u> - SE <u>NO1</u> -		ON ALLY OPEN ALLY CLOSED	FIRE SYSTEM DRY CONTACT 1*	A POWER MC	V / 1PH FOR E1 :A: 6.13 IOP: 15	LINE 1 LINE 2 GROUND	ODS10 MARK KEF-1	4 230\ <:
230V / 1PH OWER FOR S1 MCA: 3.63 MOP: 15	LINE 1 LINE 2 GROUND	CN-S1 <u>L1</u> 0	OL-S1 -0		LC		CSF-1 ROOFTOP SUPPLY S1 2.9 FLA 0.25 HP 230V / 1PH					
(BY OT	T TRIP (HERS)		DRY CONTA	APP	LIANCE (BY O	CONTACTO THERS)	RS	_				
WIRING	Y OPEN		OT EUTRAL		MMON	EXAMPLE: CLOSED APPLI/	→ HOT → NEUTRAL ANCE					



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Naples, FL 34102 Naples, FL 34102	
APAS CONSTRUCTION CONSULTING CONSULTING CONSULTION CONSULTION CONSTRUCTION CONSULTION CONSULTION CONSULTINGLIC.COM MICHAEL D. STEWART I PRESIDENT WWW.NPSCONSULTINGLIC.COM MICHAEL D. STEWART, PE LA REG #72459 COPRIGHTED 2024	
1/24/2024 02/28/2024	
BID DRAWINGS BID DRAWINGS	
PHASE 95%	

H3

ELECTRICAL SPECIFICATIONS (NEC 2020)

GENERAL

1. ENTIRE INSTALLATION TO COMPLY WITH THE (NFPA 70), NFPA STANDARDS AS APPLICABLE IN ADDITION TO SPECIFICATIONS AS OUTLINED BELOW. ALL ELECTRICAL WORK FOR THE ENTIRE PROJECT SHALL BE PERFORMED IN A NEAT AND CRAFTSMANLIKE MANNER BY PERSONS SKILLED IN THE TRADE. AND SHALL BE DONE UNDER THE SUPERVISION OF A MASTER ELECTRICIAN LICENSED TO DO WORK IN THE AREA WHERE THE PROJECT IS TO BE CONSTRUCTED. ALL WORK SHALL BE IN STRICT ACCORDANCE WITH THE LATEST COPY OF THE NATIONAL ELECTRIC CODE PRESENTLY ENFORCED.

SCOPE:

- THE PROJECT INCLUDES ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY TO PROVIDE A COMPLETE ELECTRICAL 1. INSTALLATION INCLUDING, BUT NOT LIMITED TO, POWER SERVICES (TEMPORARY, NORMAL, AND STAND-BY OR EMERGENCY SWITCHBOARDS, AUTOMATIC TRANSFER SWITCHES, SERVICE ENTRANCE(S), DISCONNECTS, DISTRIBUTION PANELS, CONDUIT WIRING, JUNCTION AND OUTLET BOXES, WIRING DEVICES AND COVER PLATES, LIGHTING FIXTURES, CONNECTION CHORDS, SPECIAL CONNECTIONS AND OUTLETS, ALL AS ILLUSTRATED ON THE PLANS. THE ELECTRICAL CONTRACTOR SHALL COORDINATE ALL WORK WITH OTHER TRADES, UTILITY COMPANIES, AND GOVERNING AUTHORITIES.
- THE ELECTRICAL CONTRACTOR TO FURNISH A MINIMUM 100 AMP SINGLE PHASE TEMPORARY SERVICE. POWER COMPANY FEES AND MONTHLY ELECTRIC BILL TO BE PAID BY THIS CONTRACTOR.

CODES

1. ALL WORK PERFORMED SHALL BE IN ACCORDANCE WITH ANSI, NFPA70, STATE OF FLORIDA LAWS, AND ALL LOCAL RULES AND REGULATIONS, INCLUDING THE NATIONAL ELECTRIC CODE AND ENERGY CODE IN EFFECT. PERMITS:

1. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS AND PAYING ALL FEES ASSOCIATED THEREWITH. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING INSPECTIONS, INCLUDING ALL FEES ASSOCIATED WITH RE-INSPECTIONS.

DRAWINGS:

THE DRAWINGS ARE DIAGRAMMATIC, AND DO NOT SHOW ALL CHANGES IN HEIGHT, STRUCTURAL MEMBERS, DUCTWORK, PIPING, BRACKETS AND ANY OTHER NUMBER OF ITEMS WHICH MIGHT CAUSE A CONFLICT. THIS CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH OTHER TRADES AS TO THE LOCATION OF HIS DEVICES AND NECESSARY AREAS FOR PANELS AND CONDUIT/WIRING RUNS. VERIFY AND COORDINATE ALL ELECTRICAL WORK WITH ALL TRADES TO PROVIDE A TIMELY INSTALLATION. ADDITIONAL CHARGES DUE TO LACK OF COORDINATION WILL NOT BE APPROVED.

MATERIAL:

1. ALL MATERIALS SHALL BE NEW, FREE FROM DEFECTS, AND SHALL BE LISTED BY AND BEAR THE U.L. LABEL WHERE SUBJECT TO APPROVAL. MATERIALS SHALL BE OF THE SAME MANUFACTURER OR BRAND FOR EACH TYPE OF MATERIAL. UNLESS DESIGNATED OTHERWISE.

FIXTURES:

1. ALL FIXTURES SHALL BE AS LISTED IN THE LIGHTING FIXTURE SCHEDULES/ RECOMMENDATIONS.

PANELS:

- 1. ALL PANELS TO BE FURNISHED AS PER PANEL SCHEDULE. SQUARE D, GE, AND SIEMENS ARE ACCEPTABLE MANUFACTURERS.
- 2. ALL SWITCHBOARD AND OVERCURRENT DEVICES SHALL BE SERIES-RATED TO WITHSTAND THE AVAILABLE FAULT CURRENT VERIFY WITH LOCAL UTILITY COMPANY. SEE PANEL SCHEDULE.

DEVICES:

- 1. EXTERIOR DISCONNECT SWITCHES SHALL BE NEMA 3R ENCLOSURES AND ELECTRICALLY PROTECTED AS PER MANUFACTURER'S SPECIFICATIONS. (SEE MECHANICAL).
- 2. INTERIOR DISCONNECT SWITCHES SHALL BE NEMA 1 ENCLOSURES AND ELECTRICALLY PROTECTED AS PER MANUFACTURER'S SPECIFICATIONS. (SEE MECHANICAL).
- 3. SWITCHES SHALL BE 20 AMP, SPECIFICATION GRADE TOGGLE SWITCHES, SIDE WIRED WITH GROUNDING TERMINAL; COLOR SHALL BE WHITE (UNLESS NOTED OTHERWISE) WITH MATCHING COVERPLATE; MOUNTING HEIGHT SHALL BE +48" AFF TO BOTTOM.
- RECEPTACLES SHALL BE 15 AMP (MINIMUM), SPECIFICATION GRADE, SIDE WIRED WITH GROUNDING TERMINAL; COLOR SHALL BE WHITE (UNLESS NOTED OTHERWISE) WITH MATCHING COVERPLATE; MOUNTING HEIGHT NOTED IN SYMBOL LEGEND OR ON DRAWING
- 5. ALL RECEPTACLES INSTALLED IN KITCHENS, OR WITHIN 6 FEET (6') OF A WATER SUPPLY (i.e.: SINK), SHALL BE GROUND FAULT CIRCUIT INTERRUPTER (G.F.C.I.) DEVICES WITH DOWNSTREAM DEVICES IDENTIFIED.
- 6. ALL 120-VOLT, SINGLE PHASE, 15- AND 20-AMPERE BRANCH CIRCUITS SUPPLYING OUTLETS INSTALLED IN BATHROOMS SHALL HAVE GROUND-FAULT CIRCUIT-INTERRUPTER PROTECTION FOR PERSONNEL

BRANCH CIRCUIT WIRING:

- ALL CONDUCTORS SHALL BE COPPER UNLESS OTHERWISE SPECIFIED ON PLANS
- 2. MINIMUM BRANCH CIRCUIT WIRING SHALL BE #12 AWG THWN COPPER.

TYPICAL NOTES

1. EQUIPMENT FURNISHED AND PHYSICALLY INSTALLED BY "OTHERS". ALL ELECTRICAL CONNECTIONS EXTERNAL TO THE EQUIPMENT SHALL BE MADE BY THE ELECTRICAL CONTRACTOR. WIRE, CONDUIT, LUGS, RECEPTACLES, PIGTAILS, DISCONNECTS, ETC. AS MAY BE REQUIRED SHALL BE FURNISHED BY THE ELECTRICAL CONTRACTOR. NOTE: INCLUDE WORSE CONDITION IN PRICING. VERIFY ROUGH-IN LOCATIONS, TYPE OF CONNECTION AND AMPACITY

EQUIRED FROM APPLICABLE EQUIPMENT DRAWINGS PRIOR TO INSTALLING ANY CONDUIT, CONDUCTORS OR BOXES.

- 2. WALL TELEPHONE/DATA OUTLET. INSTALL 2-GANG BOX WITH MODULAR TELEPHONE DEVICE IN COVER PLATE. INSTALL (1) 3/4" EMT CONDUIT TO ACCESSIBLE CEILING SPACE OR HOMERUN TO TELEPHONE/COMPUTER TERMINAL EQUIPMENT. HEIGHT, UNLESS NOTED, IS 18" ABOVE FINISH FLOOR.
- 3. PROVIDE LIGHT FIXTURE AND RECEPTACLE AT LOCATIONS INDICATED FOR HVAC MAINTENANCE LIGHTING. USE COMBINATION SWITCH AND RECEPTACLE FOR LIGHT CONTROL. FIELD DETERMINES EXACT LOCATION AND HEIGHT.
- 4. SWITCHED JUNCTION BOX IN CEILING FOR CEILING FAN OR LIGHT. NOTE: BOX MUST BE IDENTIFIED FOR FAN SUPPORT USE). ANCHOR TO STRUCTURE TO SUPPORT 75 LBS. ELECTRICAL CONTRACTOR TO PROVIDE AND INSTALL FAN AND/OR LIGHT, AND ALL WIRING INCLUDING SWITCH AND POWER LEGS. VERIEV AND COORDINATE FAN TYPE WITH OWNER
- 5. IF THE CEILING SPACE OR HVAC CLOSETS IN THIS PROJECT WILL BE USED AS A RETURN AIR PLENUM THEN ALL MATERIALS AND COMPONENTS LOCATED ABOVE CEILING SPACE OR CLOSET (WITHIN RETURN AIR PLENUM) SHALL BE APPROVED FOR PLENUM USE (OR) SHALL BE WRAPPED WITH A UL LISTED AND APPROVED PLENUM WRAP AND INSTALLED PER MANUFACTURER'S INSTRUCTIONS. MATERIALS AND WRAPS SHALL MEET THE FLAME SPREAD INDEX OF NOT MORE THEN 25 AND A SMOKE DEVELOPED INDEX OF NOT MORE THAN 50 WHEN TESTED IN ACCORDANCE WITH ASTM E 84 OR UL 723. THIS NOTE SHALL APPLY TO ALL ITEMS LOCATED WITHIN THE RETURN AIR PLENUM SPACE WHETHER THEY ARE NEW OR EXISTING. ENTIRE PLENUM SPACE SHALL COMPLY WITH LOCAL BUILDING CODES. THIS NOTE SHALL SUPERCEDE ALL OTHER NOTES LOCATED ON THESE DRAWINGS OR OTHER DRAWINGS INCLUDED FOR THIS PERMIT

GENERAL NOTES: ELECTRICAL

- 1. ALL ELECTRICAL SWITCHGEAR, PANELS, AND DEVICES SHALL BE INSTALLED 1'-0" ABOVE FLOOD ELEVATION. REFER TO ARCHITECTURAL DRAWINGS FOR FLOOD ELEVATION AND COORDINATE WITH GENERAL CONTRACTOR.
- THE ELECTRICAL CONTRACTOR SHALL VERIFY AND COORDINATE ALL ELECTRICAL SERVICE ROUGH-IN AND INSTALLATION DETAILS, FEES, WITH THE LOCAL POWER COMPANY/UTILITY FIELD ENGINEER PRIOR TO AND INCLUDE IN BID! ELECTRICAL METERING EQUIPMENT AND METERING DEVICES ARE REQUIRED TO BE APPROVED BY POWER COMPANY
- 3. THE ELECTRICAL INSTALLATION SHALL BE IN ACCORDANCE WITH ALL STATE/LOCAL BUILDING CODES/ORDINANCES/REGULATIONS PRESENTLY IN EFFECT. IN ADDITION, COMPLIANCE WITH THE NATIONAL ELECTRICAL CODE (N.E.C.).
- THE ELECTRICAL CONTRACTOR SHALL VISIT THE SITE IN ORDER TO FAMILIARIZE THEM SELF WITH EXISTING CONDITIONS, FAILURE TO DO SO WILL NOT WARRANT ANY ADDITIONAL CHARGES TO THE OWNER.
- 5. THE ELECTRICAL CONTRACTOR SHALL INCLUDE IN THEIR BID, ANY CUTTING OR PATCHING OF CONCRETE/ASPHALT PAVEMENTS, ETC. TO RUN ELECTRICAL.
- ALL EQUIPMENT, FIXTURES, ETC. SHALL BE STARTED, TESTED, ADJUSTED AND PLACED IN SATISFACTORY OPERATING CONDITION. THIS CONTRACTOR SHALL GUARANTEE ALL WORKMANSHIP, MATERIALS AND EQUIPMENT TO BE FREE OF DEFECTS FOR A PERIOD OF ONE (1) YEAR FROM DATE OF CERTIFICATE OF OCCUPANCY (C.O.), AND SHALL REPAIR ANY SUCH DEFECTS WITHOUT COST TO THE OWNER. ALL EQUIPMENT SHALL BE COVERED FOR THE DURATION OF THE MANUFACTURER'S GUARANTEE OR WARRANTY. THIS CONTRACTOR SHALL FURNISH THE OWNER WITH ALL MANUFACTURER'S GUARANTEE AND WARRANTIES.
- HVAC AIR HANDLER AND CONDENSING UNIT CIRCUIT BREAKERS MUST BE U.L. LISTED AS "HACR" RATED IN ORDER TO USE NON-AUTO DISCONNECTS AT HVAC EQUIPMENT. IF NOT LISTED, THEN A FUSED DISCONNECT IN ACCORDANCE WITH THE EQUIPMENT MANUFACTURER'S NAMEPLATE REQUIREMENTS MUST BE INSTALLED AT THE EQUIPMENT.
- THE ELECTRICAL, GENERAL, HVAC, AND PLUMBING CONTRACTOR(S) SHALL STRICTLY ADHERE TO THE FOLLOWING ITEMS WHEN DEALING WITH ELECTRICAL EQUIPMENT CLEARANCES:
- A. NO PIPING OR DUCTWORK OF ANY KIND SHALL BE INSTALLED ABOVE ANY SWITCHBOARD OR PANELBOARD. THIS AREA TO REMAIN CLEAN FROM THE EQUIPMENT TO 25' ABOVE OR TO THE BOTTOM OF THE STRUCTURAL SLAB.
- B. A CLEARANCE OF 36" MINIMUM SHALL BE MAINTAINED IN FRONT OF ELECTRICAL EQUIPMENT FOR THE ENTIRE WIDTH OF THE EQUIPMENT, PLUS A MINIMUM OF 30" TOTAL LEFT/RIGHT CLEARANCE.

- 9. ALL "WEATHERPROOF" ("WP") DEVICES ARE TO BE INSTALLED WITH A WEATHER-SHIELDING COVER.
- CEILING GRIDS, DOOR SWINGS, ETC.
- 12. THE INTENT OF THESE DRAWINGS IS TO PROVIDE A COMPLETE AND FULLY OPERATIONAL ELECTRICAL INSTALLATION.
- ELECTRICAL SYSTEM INSTALLATION.
- 14. TECHNICIANS SKILLED IN THEIR TRADE SHALL PERFORM ALL ELECTRICAL INSTALLATIONS IN A PROFESSIONAL MANNER.
- 15. SATISFACTORY OPERATION BY THE OWNER.
- 17. ALL SERVICE AND FEEDER CONDUITS SHALL HAVE EXPANSION FITTINGS WHEN PENETRATING SLABS, ETC. TO ALLOW FOR STRUCTURAL SETTLEMENT
- 18. PROVIDE "PVC" CONDUITS STUBBED OUT, BELOW GRADE FOR ADDITIONAL SERVICES, IN ORDER TO PROVIDE CONCEALED TELEPHONE AND/OR DATA SERVICE ENTRANCE.
- 19. PROVIDE TIME CLOCKS WITH BATTERY BACK-UP TO CONTROL ALL SIGNAGE AND EXTERIOR LIGHTING CIRCUITS; SEE POWER RISER DIAGRAM FOR ADDITIONAL DETAILS.
- PANEL SCHEDULES AND RISER DIAGRAM.
- SCHEDULE FOR FIXTURE RECOMMENDATIONS, LAMPS, ETC.
- FIXTURE CONTROL WIRING.
- 23. NOTICE TO CONTRACTOR: REVISIONS TO THESE DRAWINGS AND CERTIFICATION THEREOF WHICH MAY BE REQUIRED BECAUSE OF SHALL BE REQUIRED AT THE TIME OF CERTIFICATION DELIVERY. INSTALLATION:

GENERAL:

- ROUGH-IN LOCATIONS SHALL BE COORDINATED WITH ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS, AS WELL AS EQUIPMENT SIZE, TO AVOID CONFLICT WITH OTHER TRADES.
- ADDITIONAL COSTS TO THE OWNER.

WIRING METHODS:

- ALL PVC COMPONENTS (PIPING, FITTINGS, CEMENT, ETC.) SHALL BE FROM THE SAME MANUFACTURER.
- EXTERIOR ABOVE GRADE: SINGLE- OR MULTI-CONDUCTOR COPPER WIRE WITH GROUND, MEETING N.E.C. AND NEMA THE SAME MANUFACTURER.

NOTE: MAXIMUM LENGTH OF FLEXIBLE CONDUIT SHALL BE SIX FEET (6').

ETC.) SHALL BE FROM THE SAME MANUFACTURER.

SHALL BE THREE FEE

INTERIOR: SINGLE- OR MULTI-CONDUCTOR COPPER WIRE WITH GROUND, MEETING N.E.C. AND NEMA REQUIREMENTS, IN APPROVED METALLIC (EMT) CONDUIT. ALL COMPONENTS (PIPING, FITTINGS, ETC.) SHALL BE FROM THE SAME MANUFACTURER. CONDUITS SHALL BE CONCEALED IN OR BEHIND CEILINGS, WALLS, OR FLOORS, EXCEPT WHERE EXPOSED RACEWAYS ARE SPECIFICALLY PERMITTED.

NOTE: EMT SHALL NOT BE INSTALLED IN LOCATIONS (1) SUBJECT TO SEVERE DAMAGE, (2) IN CONTACT WITH EARTH, (3) IN CONCRETE SLABS ON GRADE, (4) OTHER LOCATIONS AS LISTED IN N.E.C., ARTICLE 358.12.

- WITH N.E.C., ARTICLE 334.

6. THRU-FEEDS: MAINTAIN THRU-FEEDS ON ALL ELECTRICAL DEVICES AT C.O. EQUIPMENT

- OPERATION BY OTHERS.
- 2. THIS CONTRACT TO INCLUDE CONNECTION OF LINE VOLTAGE ONLY. CONTROL WIRING TO BE BY THE HVAC CONTRACTOR.

<u>GROUNDING:</u>

- METAL BUILDING FRAME AND GROUND RING WITH JUMPERS SIZED FROM 250-94.
- MINIMUM #6 AWG-CU.

WARRANTY: NOTE

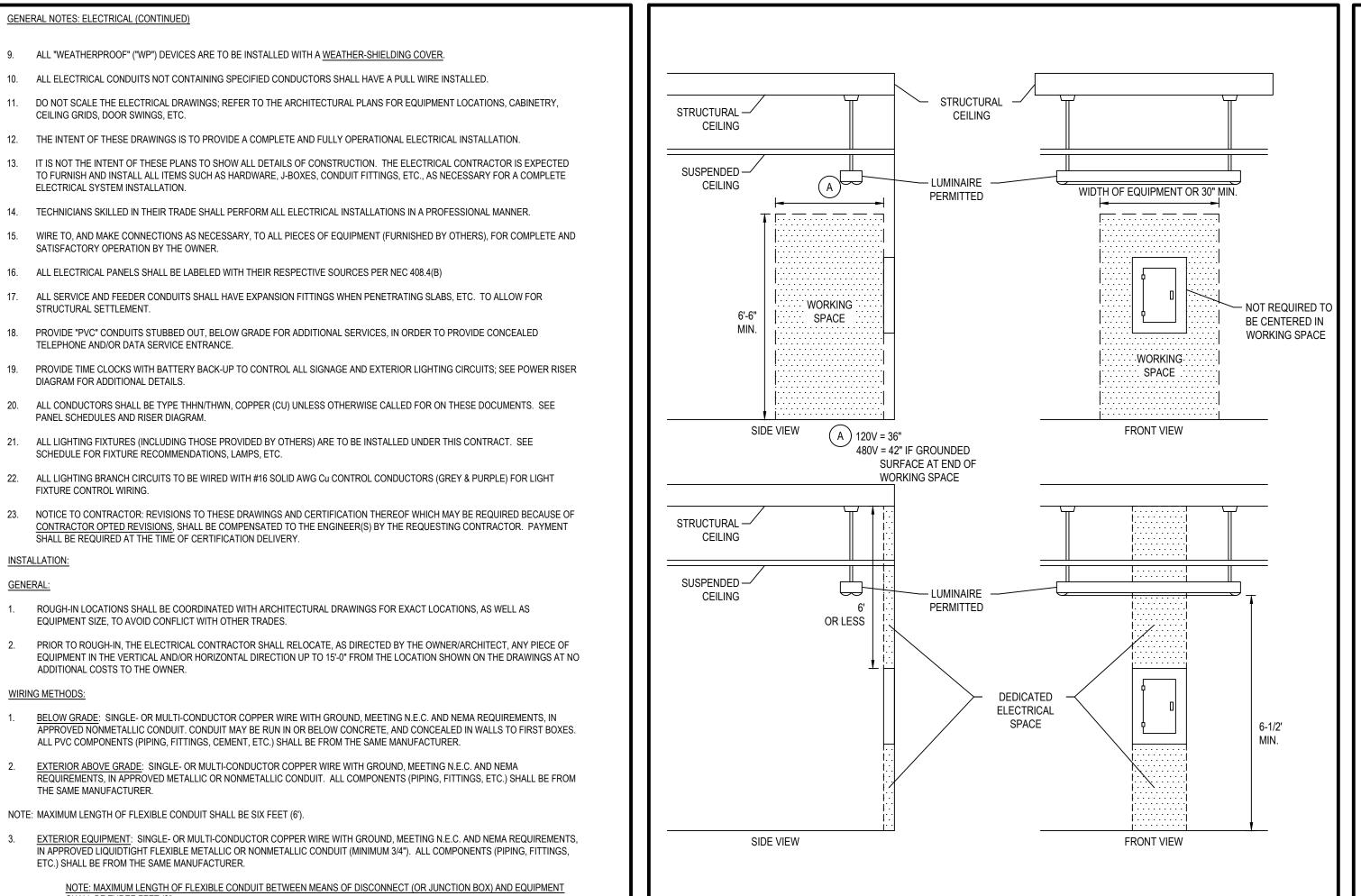
UNDER THE SCOPE OF WORK FOR A PERIOD OF ONE YEAR FROM THE CERTIFICATE OF OCCUPANCY.

2. E.C. SHALL PROVIDE OWNER AND ENGINEER WITH REPRODUCIBLE "AS-BUILT" DRAWINGS SHOWING ALL REQUIRED MODIFICATIONS THAT HAVE OCCURRED IN THE FIELD.

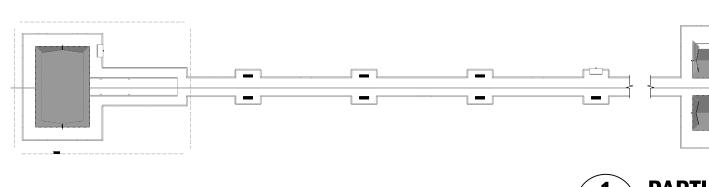
ELEVATOR ROOMS (AS APPLICABLE)

ALL ELEVATOR MACHINE ROOMS SHALL BE PROVIDED WITH A FUSED DISCONNECT FOR ALL EQUIPMENT INCLUDING EQUIPMENT ROOM AIR CONDITIONING SYSTEMS, LIGHTING, RECEPTACLES, ETC. (REGARDLESS OF PLAN SYMBOL) IN ACCORDANCE WITH ASME A17.1 SITE VERIFICATION NOTES

- MAY INDICATE THE PRESENCE OF A "HIGH LEG" DELTA SYSTEM. ENGINEER SHALL BE NOTIFIED IMMEDIATELY FOR REQUIRED REVISIONS.
- SHALL BE LABELED PER 408.3 AND THE HIGH LEG CONDUCTOR TO BE MARKED PER 110.15.



WORKING SPACE/DEDICATED ELECTRICAL SPACE AT PANEL BOARDS DETAIL



PARTIAL KEY PLAN

CODE COMPLIANCE STATEMENT

ENTIRE INSTALLATION SHALL COMPLY WITH CODES BELOW, IN ADDITION TO ALL REFERENCED STANDARDS OR ANY OTHER LOCALLY ADOPTED AMENDMENTS.

FLORIDA BUILDING CODE: FLORIDA ENERGY CODE: FLORIDA FIRE CODE: FLORIDA FUEL GAS CODE FLORIDA MECHANICAL CODE FLORIDA PLUMBING CODE NFPA 101 LIFE SAFETY CODE NATIONAL ELECTRICAL CODE

2023 EDITION 2020 EDITION

1. ALL ITEMS ON THESE DRAWINGS MARKED AS "EXISTING" OR "EXIST" SHALL BE VERIFIES IN FIELD ANY DIFFERENCES BETWEEN ITEMS OR EQUIPMENT INDICATED AS EXISTING SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER OR ARCHITECT. PRIOR TO CONSTRUCTION, THE ELECTRICAL CONTRACTOR SHALL VERIFY THAT THE PHASE TO PHASE VOLTAGE AVAILABLE IS EQUAL TO EACH OTHER, AND EQUAL TO VOLTAGE SHOWN ON THESE DRAWINGS. A DIFFERENCE IN PHASE TO PHASE VOLTAGE

3. SPLIT PHASE CIRCUIT BREAKERS ARE NOT PERMITTED TO BE INSTALLED ON HIGH LEG DELTA SYSTEMS. HIGH LEG DELTA SYSTEMS

1. ELECTRICAL CONTRACTOR TO PROVIDE FULL WARRANTY (PARTS AND LABOR) ON ALL EQUIPMENT AND MATERIALS FURNISHED

FOOTER/FOUNDATION REINFORCING STEEL TURNED UP OR OTHERWISE EXPOSED AT THE SERVICE LOCATION WITH APPROVED BY 8' DEEP) WITH #6 COPPER GROUNDING CONDUCTOR. IF AVAILABLE ON THE PREMISES, ALSO BOND METAL COLD WATER PIPING,

PPROVED PLASTIC, 1-1/2" DEEP, WITH DEVICE RINGS OF THE SAME MATERIAL, UNLESS OTHERWISE NOTED. GALVANIZED BOXES SHALL BE MANUFACTURED BY APPLETON, NATIONAL, STEEL CITY, RACO OR APPROVED EQUAL. PLASTIC BOXES SHALL BE ALLIED. NELCO, CARLON, OR EQUAL. ALL ELECTRICAL BOXES MUST BE ACCESSIBLE AFTER CERTIFICATE OF OCCUPANCY.

1. THE ENTIRE ELECTRICAL GROUNDING SYSTEM SHALL BE IN STRICT ACCORDANCE WITH THE REQUIREMENTS OF SECTION 250.66 AND 250.122 OF THE NATIONAL ELECTRIC CODE, INCLUDING BUT NOT LIMITED TO, THE ELECTRICAL SERVICE, ITS EQUIPMENT AND

CONNECTOR TO BOND A GROUNDING CONDUCTOR SIZED PER TABLE 250 TO THE STEEL AND A DRIVEN ROD GROUND (MINIMUM 5/8"

3. ALL TELEPHONE, DATA, TELEVISION, AND OTHER TERMINAL EQUIPMENT SHALL BE BONDED TO THE GROUNDING ELECTRODE WITH

ENCLOSURE. CONDUITS AND OTHER CONDUCTIVE ENCLOSURES. NEUTRAL OR IDENTIFIED CONDUCTOR OF INTERIOR WIRING SYSTEM, MAIN PANELBOARD, POWER AND LIGHTING PANELBOARDS, NON-CURRENT-CARRYING METAL PARTS OF FIXED

EQUIPMENT SUCH AS MOTORS, STARTER AND CONTROLLER CABINETS, INSTRUMENT CASES AND LIGHTING FIXTURES. PROVIDE A SERVICE GROUND ACCORDING TO N.E.C. ARTICLE 250. THE MINIMUM INSTALLATION TO INCLUDE: BUILDING

ELECTRICAL BOXES: ALL OUTLET, DEVICE, AND JUNCTION BOXES SHALL BE STANDARD 4" SQUARE GALVANIZED STEEL OR

NON-METALLIC SHEATHED CABLE (NM, NMC, NMS) MAY BE USED WITHIN DWELLING UNITS, IN COMPLIANCE ELECTRICAL SYSTEM EXPANSION: ANY PANELBOARD MOUNTED SO THAT ITS FRONT FACE IS FLUSH WITH THE FINISHED WALL

SHALL HAVE ONE (1) 3/4" EMT CONDUIT INSTALLED FROM PANELBOARD TO ACCESSIBLE CEILING SPACE FOR EVERY FOUR (4) OR MAJOR FRACTION THEREOF, POLES INDICATED AS "SPACE" OR "SPARE" IN THE PANELBOARD SCHEDULE PER THESE DOCUMENTS.

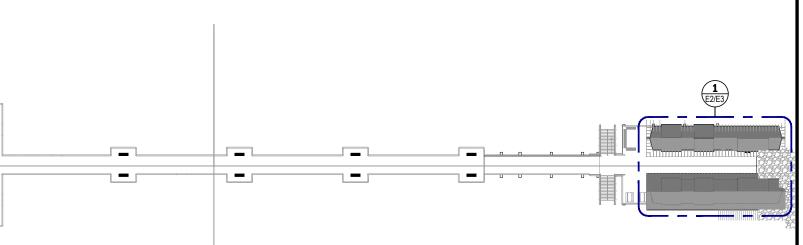
WIRE TO, AND MAKE CONNECTIONS TO, ALL PIECES OF EQUIPMENT FURNISHED BY OTHERS FOR COMPLETE AND SATISFACTORY

	ELECTRICAL PLAN LEGEND
(CLG	= CEILING) (SW=INSTALL PER 210.62) (U) = USB / DUPLEX RECEPTACLE
€	120V DUPLEX RECEPTACLE @ 18"AFF
€	120V DUPLEX RECEPTACLE @ 44"AFF (ABOVE COUNTER) OR SPECIAL HEIGHT)
\bigcirc	SPECIAL PURPOSE RECEPTACLE (VERIFY NEMA CONFIGURATION)
+	QUADPLEX RECEPTACLE @ 44"AFF 120V
₽	QUADPLEX RECEPTACLE @ 18"AFF 120V
₽	DUPLEX GFCI RECEPTACLE @ 18"AFF 120V
	DUPLEX GFCI RECEPTACLE @ 44"AFF (ABOVE COUNTER) OR SPECIAL HEIGHT)
\ominus	SIMPLEX (ABOVE COUNTER) OR SPECIAL HEIGHT)
\$	SINGLE-POLE TOGGLE SWITCH (OS= OCCUPANCY SENSOR) (T=TIMER)
Ð	SINGLE-POLE DIMMER SWITCH (COMPATIBLE W/ LIGHT FIXTURE)
OS ⊥	WALL MOUNTED OCCUPANCY SENSOR
⊥ ©§	CEILING MOUNTED OCCUPANCY SENSOR
-	
► Ů	DATA/PHONE ROUGH-IN BOX W/ 1" CONDUIT STUBBED TO CLG) NON-FUSED DISCONNECT SWITCH
ľ	FUSED DISCONNECT SWITCH
\bigcirc	JUNCTION BOX (ACCESSIBLE)
	ELECTRICAL PANEL
۲	DIRECTIONAL SIGN (UL LISTED WITH 90 MINUTE BATTERY)
	DUAL HEAD EMERGENCY LIGHT (UL LISTED WITH 90 MIN. BATTERY)
	COAXIAL CABLE ROUGH IN BOX
ଡ଼ୖୢୖ୴▼	120V RECEPTACLE COAXIAL CABLE, DATA ROUGH IN BOX - VERIFY FINAL HEIGHT
¢A>	CARD ACCESS READER ROUGH IN BOX
<u> </u>	

ELECTRICAL LEGEND NOTES

VERIFY ALL RECEPTACLE MOUNTING HEIGHTS WITH OWNER

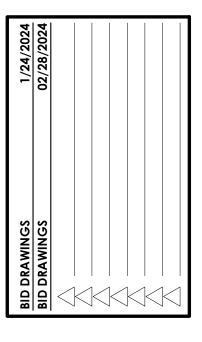
LOW VOLTAGE INDICATED ON THESE DRAWINGS IS FOR ROUGH-IN BOX LOCATIONS ONLY AND DOES NOT INCLUDE ANY WIRING OR CABLING REQUIRED. ALL LOW VOLTAGE WILL BE PERMITTED SEPARATELY BY THE CONTRACTOR. THIS INCLUDES BUT IS NOT LIMITED TO DATA WIRING, SPEAKER WIRING, TV COAX WIRING ETC

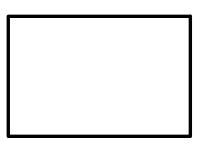


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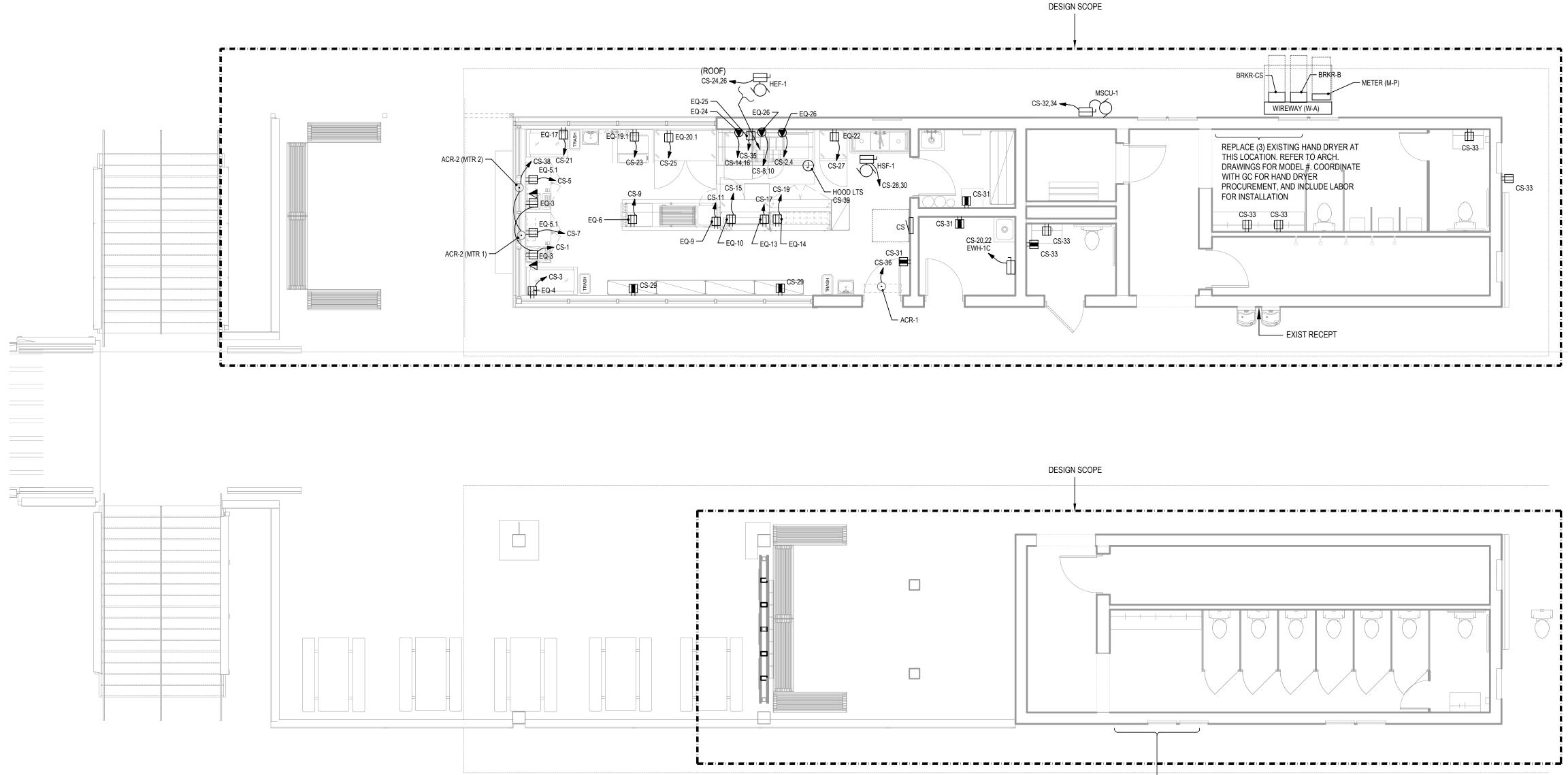
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CALLOUT	PANEL DESCRIPTION	SYMBOL	VOLTS AND PHASE	BREAKER	CIRCUIT	KVA	AMPS	NOTE 1
EQ-3	EQ-3: POS	Ф	120V 1-PH 2W	20/1	CS-1	0.1	0.83	REFER TO KITCHEN VENDOR DRAWINGS FOR DETAILS
EQ-3	EQ-3: POS	Ф	120V 1-PH 2W	20/1	CS-1	0.1	0.83	REFER TO KITCHEN VENDOR DRAWINGS FOR DETAILS
EQ-4	EQ-4: CHEST FREEZER	Ф	120V 1-PH 2W	20/1	CS-3	0.1	0.83	REFER TO KITCHEN VENDOR DRAWING FOR DETAILS
EQ-5.1	EQ-5.1: BACK BAR CABINET	Ф	120V 1-PH 2W	20/1	CS-5	0.25	2.1	REFER TO KITCHEN VENDOR DRAWING FOR DETAILS
EQ-5.1	EQ-5.1: BACK BAR CABINET	Ф	120V 1-PH 2W	20/1	CS-7	0.25	2.1	REFER TO KITCHEN VENDOR DRAWING FOR DETAILS
EQ-6	EQ-6: BACK BAR CABINET	Ф	120V 1-PH 2W	20/1	CS-9	0.36	3	REFER TO KITCHEN VENDOR DRAWING FOR DETAILS
EQ-6	EQ-6: HOT DOG GRILL	Ф	120V 1-PH 2W	20/1	CS-13	1.3	10.8	REFER TO KITCHEN VENDOR DRAWING FOR DETAILS
EQ-9	EQ-9: DISPLAY CASE, REF	Ф	120V 1-PH 2W	20/1	CS-11	0.36	3	REFER TO KITCHEN VENDOR DRAWING FOR DETAILS
EQ-10	EQ-10: UC REFRIGERATOR	Ф	120V 1-PH 2W	20/1	CS-15	0.36	3	REFER TO KITCHEN VENDOR DRAWING FOR DETAILS
EQ-13	EQ-13: HEAT LAMP	Ф	120V 1-PH 2W	20/1	CS-17	1	8.33	REFER TO KITCHEN VENDOR DRAWING FOR DETAILS
EQ-14	EQ-14: SANDWHICH REFRIG	Ф	120V 1-PH 2W	20/1	CS-19	0.78	6.5	REFER TO KITCHEN VENDOR DRAWING FOR DETAILS
EQ-17	EQ-17: CHEST FREEZER	Ф	120V 1-PH 2W	20/1	CS-21	0.19	1.6	REFER TO KITCHEN VENDOR DRAWING FOR DETAILS
EQ-19.1	EQ-19.1: ICE MAKER	Ф	120V 1-PH 2W	20/1	CS-23	1.2	10	REFER TO KITCHEN VENDOR DRAWING FOR DETAILS
EQ-20.1	EQ-20.1: UNDER COUNT. REFRIG	Ф	120V 1-PH 2W	20/1	CS-25	0.48	4	REFER TO KITCHEN VENDOR DRAWING FOR DETAILS
EQ-22	EQ-22: REACH-IN FREEZER	Ф	120V 1-PH 2W	20/1	CS-27	0.44	3.7	REFER TO KITCHEN VENDOR DRAWING FOR DETAILS
EQ-24	EQ-24: PIZZA BAKE OVEN	۲	240/120V 1-PH 3W	20/2	CS-14,16	4.15	17.3	REFER TO KITCHEN VENDOR DRAWING FOR DETAILS
EQ-25	EQ-25: UC REFRIGERATOR	Ф	120V 1-PH 2W	20/1	CS-35	0.24	2	REFER TO KITCHEN VENDOR DRAWING FOR DETAILS
EQ-26	EQ-26: ELECTRIC FRYER	۲	240/120V 1-PH 3W	60/2	CS-8,10	14	58.33	REFER TO KITCHEN VENDOR DRAWING FOR DETAILS
EQ-26	EQ-26: ELECTRIC FRYER	۲	240/120V 1-PH 3W	60/2	CS-2,4	14	58.33	REFER TO KITCHEN VENDOR DRAWING FOR DETAILS
HEF-1	HEF-1		240V 1-PH 2W	20/2	CS-24,26	2.4	10	
HSF-1	HSF-1		240V 1-PH 2W	20/2	CS-28,30	2.4	10	

VERIFY ALL INFORMATION ON SCHEDULE WITH EQUIPMENT CUTSHEETS, KITCHEN CONSULTANT DRAWINGS, NAMEPLATE DATA IN FIELD, INCLUDING LOADING, VOLTAGE, AND NEMA RECEPTACLE TYPE CONFIGURATION.

1 ELECTRICAL POWER FLOOR PLAN #### SCALE: 3/16" = 1'-0"

4' 3' 2' 1' 0

4' 3/16" = 1'-0"

			-										CTRICAL	
ItemNo	Quantity	Unit	Category	Mfr	Model	StockModel	Voltage	Phase	Amps	Cycle	Нр	Kw	ConnectionType	NE
1	2	ea	Hand Sink	Krowne	HS-26L								L	
	2	ea		Krowne	H-100									<u> </u>
2	12	ea	Wire Shelving	John Boos	EPS-1448-G-X									
3	2	ea	POS System	Custom	POS									
4	1	ea	Chest Freezer	Atosa USA, Inc.	MMF9113		115	1	1.6	60			Cord & Plug	5-
5.1	2	ea	Back Bar Cabinet, Refrigerated	True Mfg General Foodservice	TBB-24-48G-HC-LD		115	1	2.1	60	1/5		Cord & Plug	5-
6	1	ea	Soda Ice & Beverage Dispenser	Cornelius	621053405		115	1	3.0	60				
	1	ea		Cornelius	E400397		115	1	6.5	60	1/3			
7	1	ea	Work Table, Stainless Steel Top	Advance Tabco	SLAG-308-X									
8	1	ea	Hot Dog Grill	APW Wyott	HR-50		120	1	10.8	60		1.32	Cord & Plug	5-
9	1	ea	Display Case, Hot Food, Countertop	Hatco	FDWD-1-120-QS		120	1	11.6	60		1.39	Cord & Plug	
10	1	ea	Undercounter Refrigerator	True Mfg General Foodservice	TUC-48D-2-HC		115	1	3	60	1/5		Cord & Plug	5-
11			Spare Number											
12	1	ea	Overshelf	John Boos	OS-ED-1848-X									
13	1	ea	Heat Lamp	Hatco	GRAH-42-120-T-QS		120	1		60		.95		
14	1	ea	Sandwich / Salad Preparation Refrigerator	True Mfg General Foodservice	TSSU-60-16-HC		115	1	6.5	60	1/3		Cord & Plug	5-
15	1	ea	Overshelf	John Boos	OS-ED-1860-X									1
16			Spare Number											
17	1	ea	Chest Freezer	Atosa USA, Inc.	MMF9110		115	1	1.6	60			Cord & Plug	5
18			Spare Number											
19.1	1	ea	Ice Maker with Bin, Cube-Style	Manitowoc	UDF0310A		115	1	10	60	3/4			5-
20.1	1	ea	Undercounter Refrigerator	True Mfg General Foodservice	TUC-60-HC		115	1	4	60	1/4		Cord & Plug	5
21			Spare Number	v							<u> </u>			-
22	1	ea	Reach-In Freezer	True Mfg General Foodservice	TS-23F-HC		115	1	3.7	60	1/2		Cord & Plug	5
23	1	ea		Accurex	10 201 110				0				<u>J</u>	Ť
24	1	ea	Pizza Bake Oven, Countertop, Electric	Bakers Pride	P44S		208	1	34.6	60			Cord & Plug	6
25	1	ea	Undercounter Refrigerator	True Mfg General Foodservice	TUC-27D-2-HC		115	1	2	60	1/6		Cord & Plug	5
26	2	ea	Electric Floor Fryer	Imperial	IFS-40-E		110		-			14.0		Ť
20	2	cu	2.000.001.0001.000	Imperial	11 0-40-L		208	1	68	60		14.0		
27	1	ea	Griddle, Electric, Countertop	Imperial	ITG-24-E		208	3	29.0	60		8.0		<u> </u>
28	5	ea	Wire Shelving	John Boos	EPS-1830-G-X		200		20.0			0.0		<u> </u>
29			Spare Number											-
30			Spare Number											-
31	1	ea	Three (3) Compartment Sink	John Boos	3B184-X									
01	1	ea		John Boos	3B184-X									
	1	ea		John Boos	3B184-X									
	1	ea		Krowne	18-708L									1
32	1	ea	Mop Sink	Krowne	MS-2424									1
	1	ea	-	Krowne	16-127									1
33	1	ea	Booster Heater, Tankless, Electric	Hubbell	JTX031-6RS		208	1	149	60		31		
34	5	ea	Wire Shelving	John Boos	EPS-2472-G-X									1

REPLACE (3) EXISTING HAND DRYER AT

PROCUREMENT, AND INCLUDE LABOR

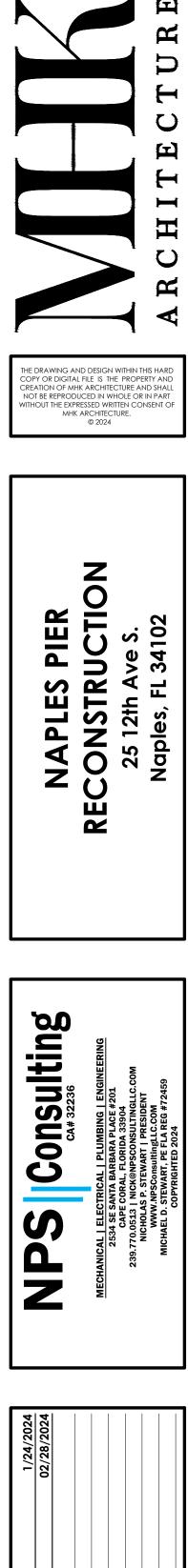
THIS LOCATION. REFER TO ARCH. DRAWINGS FOR MODEL #. COORDINATE

WITH GC FOR HAND DRYER

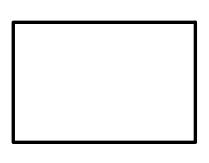
FOR INSTALLATION

ELECTRICAL NOTES - FOOD PREP AREAS & GENERAL NOTES

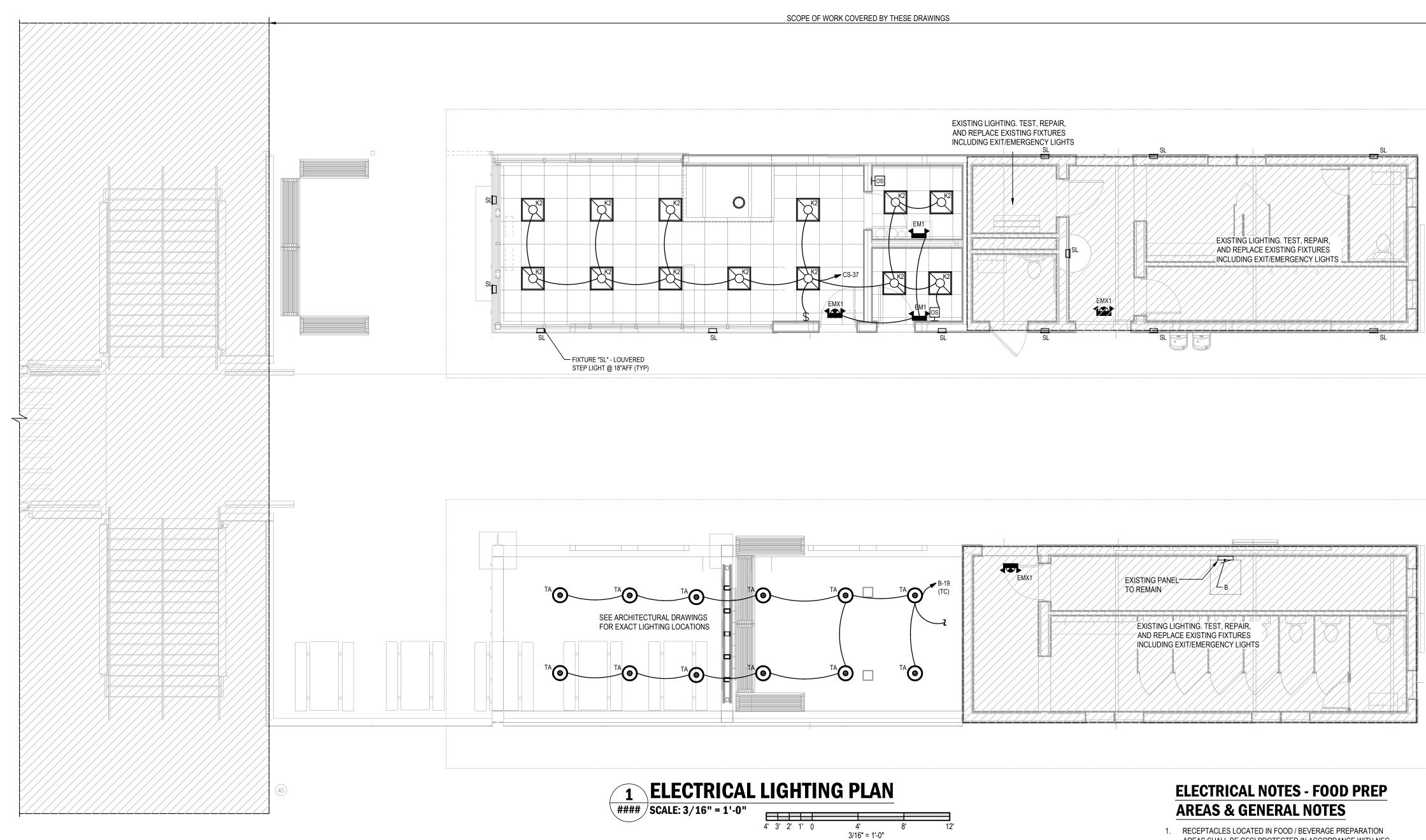
- 1. RECEPTACLES LOCATED IN FOOD / BEVERAGE PREPARATION AREAS SHALL BE GFCI PROTECTED IN ACCORDANCE WITH NEC, ARTICLE 210.
- 1.1. ALL SINGLE PHASE RECEPTACLES RATED 50A OR LESS NOT EXCEEDING 150V TO GROUND SHALL BE GFCI PROTECTED.
- 1.2. THREE PHASE RECEPTACLES RATED 100A OR LESS NOT EXCEEDING 150V TO GROUND SHALL BE GFCI PROTECTED.
- 1.3. ALL GFCI PROTECTION DEVICES SHALL BE READILY ACCESSIBLE AND LOCATED WITHIN RESPECTIVE ELECTRIC
- ALL DISCONNECTS SERVING EQUIPMENT OR APPLIANCES SHALL BE PROVIDED WITH THE RESPECTIVE CLEARANCES IN ACCORDANCE WITH NEC 110.26. DISCONNECTS ON DRAWINGS ARE DIAGRAMMATIC AND CLEARANCES DICTATE EXACT PLACEMENT.
- 3. EMERGENCY & EXIT LIGHTING SHALL BE FED FROM THE NEAREST LIGHTING CIRCUIT. PROVIDE ADDITIONAL CONDUCTOR TO FEED EMERGENCY LIGHTING IN AREAS, INDEPENDENT OF ANY LIGHTING CONTROL. BRANCH CIRCUITS SERVING EMERGENCY LIGHTING SHALL BE LABELED WITHIN THE BRANCH CIRCUIT DIRECTORY.
- 4. SOME DATA LOCATIONS HAVE BEEN INDICATED ON THESE DRAWINGS HOWEVER NOT ALL LOW VOLTAGE INFORMATION HAS BEEN PROVIDED. CONTRACTOR TO COORDINATE WITH OWNER FOR FOR INFORMATION TO ENSURE ALL LOCATIONS AND QUANTITY OF WIRES IS PROVIDED TO PROVIDE A COMPLETE OPERATIONAL LOW VOLTAGE SYSTEM SUITABLE FOR OWNER. CONTRACTOR TO PROVIDE SEPARATE LOW VOLTAGE PERMIT. COORDINATE WITH OWNER & GC PRIOR TO CONSTRUCTION.
- 5. ALL POWER UNDER HOOD SHALL BE SHUNT TRIPPED WHEN ANSUL SYSTEM IS ACTIVATED. REFER TO HOOD SHOP DRAWINGS.
- 6. ALL EXTERIOR RECEPTACLES TO BE WP, WR/GFCI PROTECTED, AND PROVIDED WITH IN-USE COVER.
- 7. KITCHEN EQUIPMENT POWER CONNECTIONS SHALL BE VERIFIED WITH OWNER, KITCHEN CONSULTANT, EQUIPMENT CUTSHEETS DURING CONSTRUCTION AS INFORMATION BECOMES AVAILABLE. MOUNTING HEIGHT FOR DEVICES SERVING KITCHEN EQUIPMENT SHALL BE VERIFIED. KITCHEN EQUIPMENT DRAWINGS ARE PROVIDED BY OTHERS, AND SUBJECT TOP CHANGE.



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BID DRAWINGS BID DRAWINGS	\langle	\langle	\leq	\leq	\leq	\leq	\leq	



PHASE PR NO	95% 23118	
E	2	



	LUMINAIRE SCHEDULE								
CALLOUT	QUANTITY	SYMBOL	DESCRIPTION	MOUNTING	MODEL	INPUT VA	VOLTS	NOTE 1	
EM1	2		EMERGENCY LIGHT	WALL/CEILING	SIGNIFY:		120V 1P 2W		
EMX1	3		EXIT / EMERGENCY LIGHT, INTERIOR, CEILNIG MOUNT	CEILING	SIGNIFY:		120V 1P 2W		
K2	13	Q	FLAT PANEL 2x2 LAY-IN LED	RECESSED	DAY-BRITE: 2 FPZ 38L 835 2 DS UNV DIM	38	120V 1P 2W		
SL	8		REFER TO ARCHITECTURAL DRAWINGS	SURFACE	REFER TO ARCHITECTURAL DRAWINGS	5	120V 1P 2W		
ТА	12	٢	REFER TO ARCHITECTURAL DRAWINGS	CEILING	REFER TO ARCHITECTURAL DRAWINGS	15	120V 1P 2W	REFER TO ARCHITECTURAL DRAWINGS	

- AREAS SHALL BE GFCI PROTECTED IN ACCORDANCE WITH NEC, ARTICLE 210. 1.1. ALL SINGLE PHASE RECEPTACLES RATED 50A OR LESS NOT
- 1.2. THREE PHASE RECEPTACLES RATED 100A OR LESS NOT
- 1.3. ALL GFCI PROTECTION DEVICES SHALL BE READILY PANEL.
- 2. ALL DISCONNECTS SERVING EQUIPMENT OR APPLIANCES SHALL BE PROVIDED WITH THE RESPECTIVE CLEARANCES IN ACCORDANCE WITH NEC 110.26. DISCONNECTS ON DRAWINGS ARE DIAGRAMMATIC AND CLEARANCES DICTATE EXACT PLACEMENT.
- 3. EMERGENCY & EXIT LIGHTING SHALL BE FED FROM THE NEAREST LIGHTING CIRCUIT. PROVIDE ADDITIONAL CONDUCTOR TO FEED EMERGENCY LIGHTING IN AREAS, INDEPENDENT OF ANY LIGHTING CONTROL. BRANCH CIRCUITS SERVING EMERGENCY LIGHTING SHALL BE LABELED WITHIN THE BRANCH CIRCUIT DIRECTORY.
- 4. SOME DATA LOCATIONS HAVE BEEN INDICATED ON THESE DRAWINGS HOWEVER NOT ALL LOW VOLTAGE INFORMATION HAS BEEN PROVIDED. CONTRACTOR TO COORDINATE WITH OWNER FOR FOR INFORMATION TO ENSURE ALL LOCATIONS AND QUANTITY OF WIRES IS PROVIDED TO PROVIDE A COMPLETE OPERATIONAL LOW VOLTAGE SYSTEM SUITABLE FOR OWNER. CONTRACTOR TO PROVIDE SEPARATE LOW VOLTAGE PERMIT.
- 5. ALL POWER UNDER HOOD SHALL BE SHUNT TRIPPED WHEN
- 6. ALL EXTERIOR RECEPTACLES TO BE WP, WR/GFCI PROTECTED, AND PROVIDED WITH IN-USE COVER.
- 7. KITCHEN EQUIPMENT POWER CONNECTIONS SHALL BE VERIFIED SHALL BE VERIFIED. KITCHEN EQUIPMENT DRAWINGS ARE PROVIDED BY OTHERS, AND SUBJECT TOP CHANGE.

EXCEEDING 150V TO GROUND SHALL BE GFCI PROTECTED.

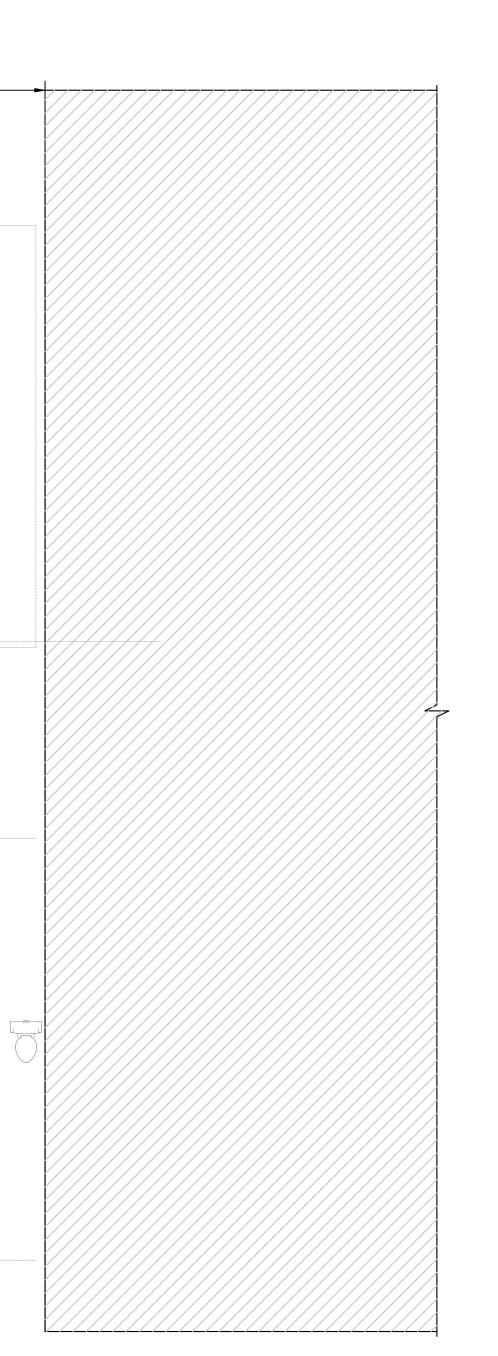
EXCEEDING 150V TO GROUND SHALL BE GFCI PROTECTED.

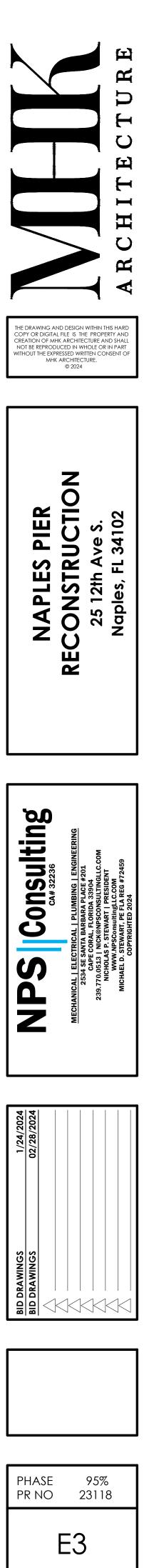
ACCESSIBLE AND LOCATED WITHIN RESPECTIVE ELECTRIC

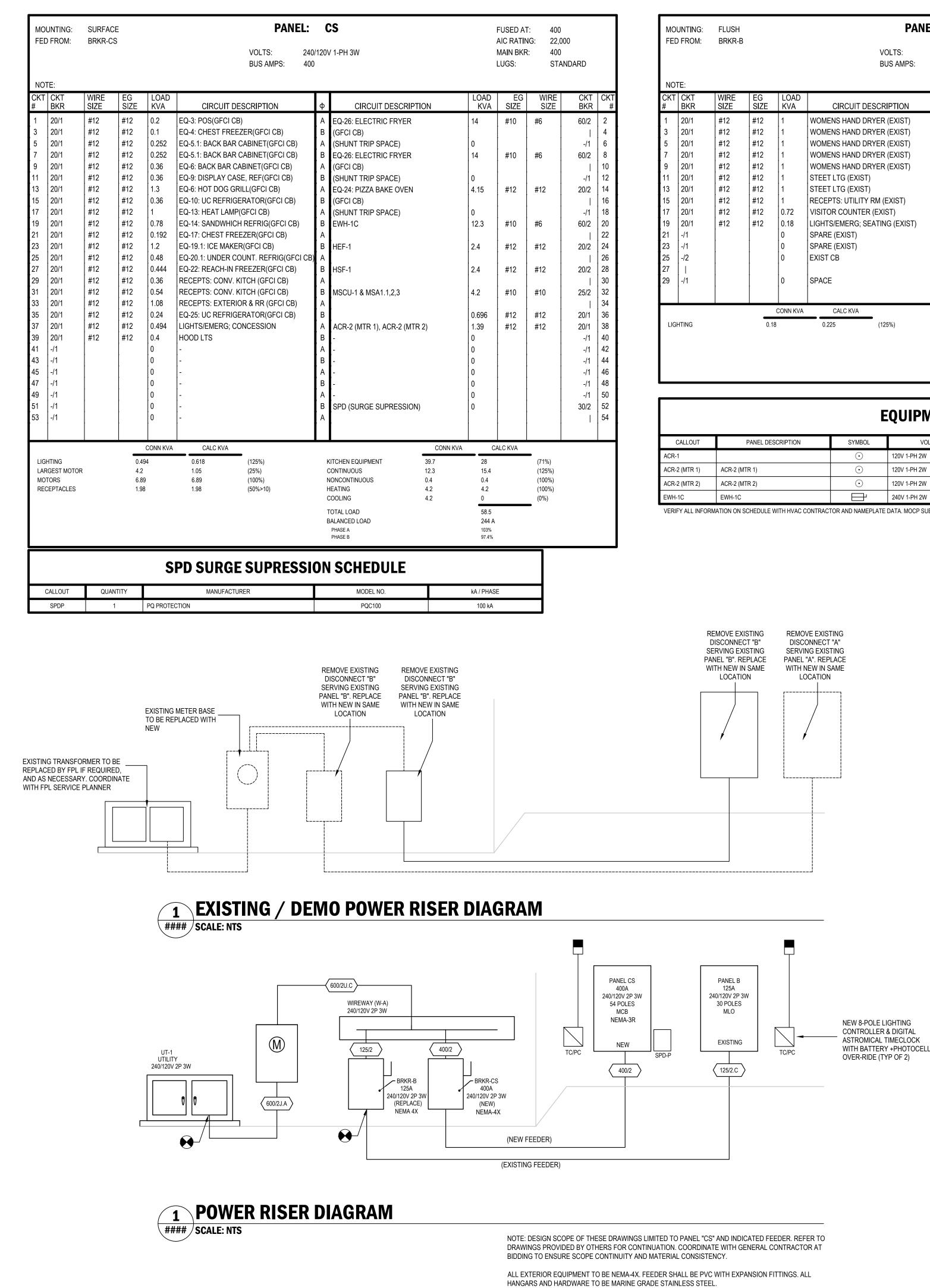
COORDINATE WITH OWNER & GC PRIOR TO CONSTRUCTION.

ANSUL SYSTEM IS ACTIVATED. REFER TO HOOD SHOP DRAWINGS.

WITH OWNER, KITCHEN CONSULTANT, EQUIPMENT CUTSHEETS DURING CONSTRUCTION AS INFORMATION BECOMES AVAILABLE. MOUNTING HEIGHT FOR DEVICES SERVING KITCHEN EQUIPMENT







FEI	ounting: D from:	FLUSH BRKR-B			PANE VOLTS: BUS AMPS:		B V 1-PH 3W			FUSED AT AIC RATIN MAIN BKR LUGS:	IG: 10,00 :: MLO		
NO CKT #	TE: CKT BKR	WIRE SIZE	EG SIZE	LOAD KVA	CIRCUIT DESCRIPTION	φ	CIRCUIT DESCRIPTI	ION	LOAD KVA	EG SIZE	WIRE SIZE	CKT BKR	CKT #
1 3 5 7 9 11 13 15 17 19 21 23 25 27 29	20/1 20/1 20/1 20/1 20/1 20/1 20/1 20/1	#12 #12 #12 #12 #12 #12 #12 #12 #12	#12 #12 #12 #12 #12 #12 #12 #12 #12 #12	1 1 1 1 1 1 1 0.72 0.18 0 0 0	WOMENS HAND DRYER (EXIST) WOMENS HAND DRYER (EXIST) WOMENS HAND DRYER (EXIST) WOMENS HAND DRYER (EXIST) WOMENS HAND DRYER (EXIST) STEET LTG (EXIST) STEET LTG (EXIST) RECEPTS: UTILITY RM (EXIST) VISITOR COUNTER (EXIST) UIGHTS/EMERG; SEATING (EXIST) SPARE (EXIST) SPARE (EXIST) EXIST CB	A B A B A B A B A B A B A B A B A B A B	MENS HAND DRYER (EXIST) MENS HAND DRYER (EXIST) MENS HAND DRYER (EXIST) MENS HAND DRYER (EXIST) MENS HAND DRYER (EXIST) WATER COOLER (EXIST) LIGHTS/EMERG; MENS RM (WATER SYSTEM (EXIST) SECURITY (EXIST) SPARE (EXIST) SPARE (EXIST) SPARE (EXIST) SPARE (EXIST) SPD (SURGE SUPRESSION) (EXIST)))) (EXIST)	1 1 1 1 0.65 0.6 1.08 0 0 0 0 0	#12 #12 #12 #12 #12 #12 #12 #12 #12	#12 #12 #12 #12 #12 #12 #12 #12 #12	20/1 20/1 20/1 20/1 20/1 20/1 20/1 20/1	2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
LIG	GHTING		0.1	CONN KVA 8	CALC KVA 0.225 (125%)		RECEPTACLES NONCONTINUOUS TOTAL LOAD BALANCED LOAD PHASE A PHASE B	CONN KVA 0.72 16.3	0.72 16.3 17.3 72 A 110% 90.3%	ALC KVA	(50%>10) (100%)		

EQUIPMENT CONNECTION SCHEDULE								
CALLOUT	PANEL DESCRIPTION	SYMBOL	VOLTS AND PHASE	BREAKER	CIRCUIT	KVA	AMPS	NOTE 1
ACR-1		\odot	120V 1-PH 2W	20/1	CS-36	0.7	5.8	
ACR-2 (MTR 1)	ACR-2 (MTR 1)	\odot	120V 1-PH 2W	20/1	CS-38	0.7	5.8	
ACR-2 (MTR 2)	ACR-2 (MTR 2)	\odot	120V 1-PH 2W	20/1	CS-38	0.7	5.8	
EWH-1C	EWH-1C		240V 1-PH 2W	60/2	CS-20,22	12.3	51.25	

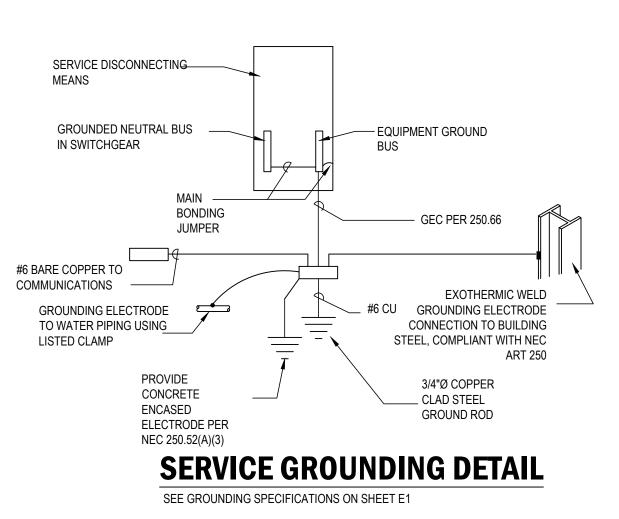


Room Mounting Surfac TED From Meter Note		VOI	.TS 240/120V 2P 3W			AIC 22,000 LUGS STA	NDARD		
CKT BREAKER # TRIP/POLES	CIRCUIT DESCRIPTIO	N		LOAE A	D KVA B	FEEDER RACEWAY AND COND	JCTORS		
1 125/2 2 400/2 3 -/2	BREAKER BRKR-B BREAKER BRKR-CS -			9.45 33.8 0	7.78 32.1 0	1-1/4"C,2#1,#1N,#6G (2)2"C,2#3/0,#3/0N,#3G			
		TOTAL CON	NECTED KVA BY PHASE	43.3	39.9				
LIGHTING LARGEST MOTOR MOTORS RECEPTACLES	0.674 4.2 6.89 2.7	CALC KVA 0.842 1.05 6.89 2.7	(125%) (25%) (100%) (50%>10)	CONTIN	DNTINUOUS NG NG	T 39.7 12.3 16.7 4.2 4.2	CALC KV 28 15.4 16.7 4.2 0 75.8 316 A	/A (71%) (125%) (100%) (100%) (0%)	

	FEEDER SCHEDULE								
ID	FEEDER AMPS	CONDUIT AND FEEDER							
125/2	125	1-1/4"C,2#1,#1N,#6G							
125/2.C	125	1-1/2"C,2#1,#1N,#6G							
400/2	400	(2)2"C,2#3/0,#3/0N,#3G							
600/2J.A	600	(2)3"C,2#350kcmil,#350kcmil N,#1/0G							
600/2U.C	600	(2)3"C,2#350kcmil,#350kcmil N							
SIZING METHOD: NEC 310.15									

VOLTAGE DROP SCHEDULE									
DEVICE	FEEDER								
	VOLTAGE DROP	WIRE SIZE	LENGTH	VOLTAGE DROP					
UT-1	0%		-	0%					
METER (M-P)	0.47%	(2)#350kcmil	67'	0.47%					
WIREWAY (W-A)	0.58%	(2)#350kcmil	15'	0.58%					
BRKR-B	0.67%	#1	13'	0.67%					
В	1.03%	#1	47'	1.26%					
BRKR-CS	0.67%	(2)#3/0	11'	0.67%					
CS	1.07%	(2)#3/0	50'	2.67%					
FEEDER LENGTHS INDICATED WITHIN VOL	TGAE DROP SCHEDUL	E ARE REFERENCE ONLY AND SHALL NOT B	E USED FOR	2					

BIDDING PURPOSES.

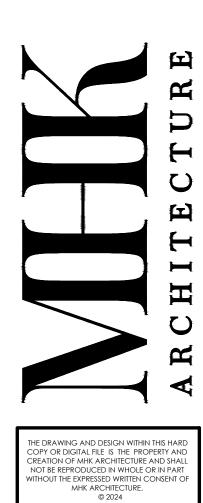




FAULT CURRENT SCHEDULE								
DEVICE	FAULT	AIC RATING	L-L VOLTS	L-N VOL				
UT-1	18,039	22,000	240V	120V				
METER (M-P)	14,572	22,000	240V	120V				
WIREWAY (W-A)	13,950	22,000	240V	120V				
BRKR-B	12,306	22,000	240V	120V				
В	8,125	10,000	240V	120V				
BRKR-CS	13,197	22,000	240V	120V				
CS	10,672	22,000	240V	120V				

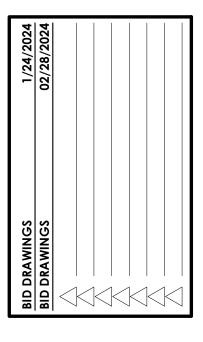
BIDDING PURPOSES.

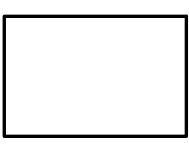
THE SERVICE EQUIPMENT SHALL BE LEGIBLY MARKED IN THE FIELD WITH THE MAXIMUM AVAILABLE FAULT CURRENT. THE FIELD MARKING SHALL INCLUDE THE DATE THE FAULT CURRENT CALCULATION WAS PERFORMED AND BE OF SUFFICIENT DURABILITY TO WITHSTAND THE EMVIRONMENT IN WHICH IT IS INSTALLED PER SECTION 110.24(A)

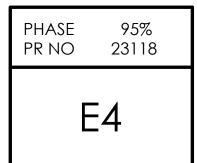


Ζ NAPLES PIER CONSTRUCTION 25 12th Ave S. Naples, FL 34102 Ŭ R



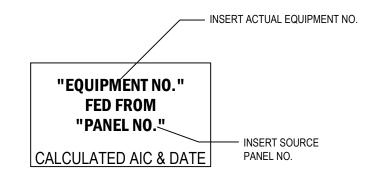




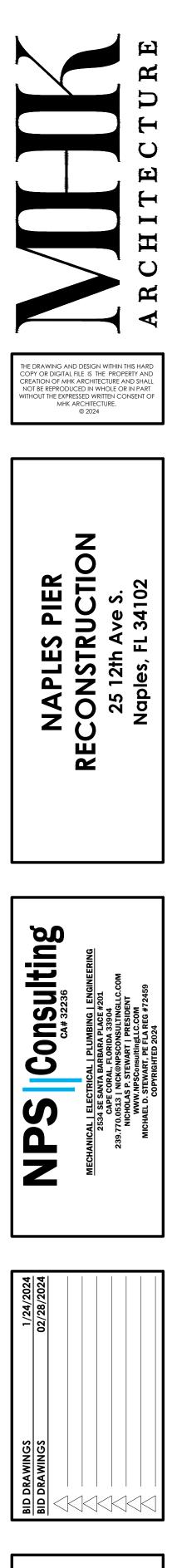


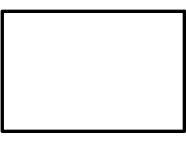
GENERAL ELECTRICAL NOTES

- 1. CONTRACTOR SHALL PROVIDE CATALOG CUT SHEET SUBMITTALS FOR ALL EQUIPMENT AND MATERIALS UNDER CONTRACTORS SCOPE OF SUPPLY. OWNER APPROVAL IS REQUIRED PRIOR TO PROCUREMENT.
- ALL ELECTRICAL MATERIAL AND EQUIPMENT SHALL BE NEW AND SHALL BE UL LISTED AND SHALL BEAR THE UL LABEL.
- 3. ALL WORK SHALL COMPLY WITH THE OF THE NEC (NFPA 70)
- 4. CONDUIT ROUTING SHOWN ON THE DRAWINGS IS SCHEMATIC. CONTRACTOR TO COORDINATE INSTALLATION WITH OTHER TRADES.
- 5. CONTRACTOR SHALL FURNISH AND INSTALL NEW TYPEWRITTEN PANEL SCHEDULES FOR ALL POWER PANELS AND PANELBOARDS AFFECTED BY THIS PROJECT.
- 6. CONTRACTOR SHALL FURNISH AND INSTALL BLACK PHENOLIC NAMEPLATES ETCHED TO REVEAL 1/4" WHITE LETTERS FOR ALL ELECTRICAL EQUIPMENT INSTALLED IN ELECTRIC ROOMS OR COMMON AREA LOCAL DISCONNECT SHALL BE LABELED WITH EQUIPMENT NUMBER OF THE EQUIPMENT FED, AND SHALL INDICATE SOURCE OF SUPPLY.



- 8. LIGHT SWITCHES SHALL BE MOUNTED AT 48" AFF.
- 9. PROVIDE UL LISTED THROUGH PENETRATION FIRESTOP SYSTEM FOR FIRE RATED WALL PENETRATIONS.
- 10. CONTRACTOR SHALL PROVIDE GALVANIZED STEEL, OR EQUAL, SUPPORT BRACKETS AS REQUIRED FOR ALL DISCONNECTS SWITCHES, PANELS, ETC.
- 11. CONTRACTOR SHALL COORDINATE LOCATION OF INDUSTRIAL LIGHT FIXTURES IN MECHANICAL SPACES TO AVOID MECHANICAL EQUIPMENT AND DUCTWORK.





PHASE	95%
PR NO	23118
E	5

GENERAL: DETAILS AND SECTIONS SHOWN ON THE DRAWINGS ARE TYPICAL AND APPLY TO SIMILAR SITUATIONS ELSEWHERE, EXCEPT AS OTHERWISE INDICATED. ADAPT REQUIREMENTS OF DETAILS, SECTIONS, PLANS, AND NOTES AT LOCATIONS WHERE CONDITIONS ARE SIMILAR.

CENTER ALL FOOTINGS AND PIERS UNDER COLUMNS ABOVE UNLESS SPECIFICALLY DIMENSIONED OTHERWISE.

STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH JOB SPECIFICATIONS AND ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, AND SITE DRAWINGS. CONSULT THESE DRAWINGS FOR SLEEVES, DEPRESSIONS, AND OTHER DETAILS NOT SHOWN ON STRUCTURAL DRAWINGS.

CONTRACTOR SHALL LOCATE ALL BURIED UTILITIES PRIOR TO EXCAVATION FOR BUILDING FOUNDATIONS. THE STRUCTURAL ENGINEER SHALL BE NOTIFIED OF POTENTIAL CONFLICTS BETWEEN FOUNDATIONS AND BURIED UTILITIES.

CODE REQUIREMENTS: THE BUILDING STRUCTURE IS DESIGNED IN ACCORDANCE WITH THE 2023 8th EDITION OF THE FLORIDA BUILDING CODE. FOLLOW ALL APPLICABLE PROVISIONS FOR ALL PHASES OF CONSTRUCTION. ADDITIONS ARE IN COMPLIANCE WITH THE 2023 EDITION OF THE FLORIDA EXISTING BUILDING CODE.

EXISTING CONDITIONS: ALL EXISTING CONDITIONS, DIMENSIONS AND ELEVATIONS SHALL BE FIELD VERIFIED. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY SIGNIFICANT DISCREPANCIES FROM CONDITIONS SHOWN ON THE DRAWINGS.

DESIGN CRITERIA: DESIGN WAS BASED ON STRENGTH AND DEFLECTION CRITERIA OF THE 2020 FLORIDA BUILDING CODE. THE FOLLOWING LOADS WERE USED FOR DESIGN, WITH LIVE LOADS REDUCED PER THE 2023 FBC.

SUPERIMPOSED DEAD LOADS: ROOF

20 PSF 300 POUND CONCENTRATED

INCLUDES 5 PSF AND A 250 LB POINT LOAD FOR SPRINKLER PIPING.

20 PSF

30 PSF

5.0 IN/HR

ROOF LIVE LOAD: RAIN LOAD: RAIN

RAINFALL INTENSITY WIND SPEED (ASCE 7-22)

RISK CATEGORY EXPOSURE INTERNAL PRESSURE COEFF 0.0 INTERNAL PRESSURE COEFF +/- 0.55 INTERNAL PRESSURE COEFF +/- 0.18 WALL PRESSURE

170 MPH (132 MPH ALLOWABLE) OPEN BUILDING PARTIALLY ENCLOSED ENCLOSED +/- 60 PSF

OPENINGS LOCATED WITHIN 30FT OF GRADE SHALL BE PROTECTED FROM WIND BORNE DEBRIS PER MISSILE LEVEL D OF ASTM E1996.

SUBMITTALS: SHOP DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT PRIOR TO FABRICATION AND CONSTRUCTION REGARDING ALL STRUCTURAL ITEMS INCLUDING THE FOLLOWING:

CONCRETE MIX DESIGNS, CONCRETE AND MASONRY REINFORCING,

EMBEDDED STEEL ITEMS.

SHOP DRAWINGS SHALL BE REVIEWED BY THE CONTRACTOR PRIOR TO SUBMITTAL TO THE ARCHITECT/ENGINEER. DRAWINGS SUBMITTED WITHOUT REVIEW WILL BE RETURNED UNCHECKED.

IF THE SHOP DRAWINGS DIFFER FROM OR ADD TO THE DESIGN OF THE STRUCTURAL DRAWINGS, THEY SHALL BEAR THE SEAL AND SIGNATURE OF A STRUCTURAL ENGINEER REGISTERED IN THE STATE OF THE PROJECT LOCATION. ANY CHANGES TO THE STRUCTURAL DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT AND ARE SUBJECT TO THE REVIEW AND ACCEPTANCE OF THE ENGINEER.

SHOP DRAWINGS WILL BE REVIEWED FOR GENERAL COMPLIANCE WITH THE DESIGN INTENT OF THE CONTRACT DOCUMENTS ONLY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY COMPLIANCE WITH THE CONTRACT DOCUMENTS AS TO QUANTITY, LENGTH, ELEVATIONS, DIMENSIONS, ETC. CONTRACTOR SHALL NOT BE RELIEVED FROM RESPONSIBILITY FOR ERRORS OR OMISSIONS IN SHOP DRAWINGS OR MIX DESIGNS BY THE ENGINEER'S REVIEW.

CONCRETE: REINFORCED CONCRETE CONSTRUCTION SHALL CONFORM TO THE FBC AND ACI 318 "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE". CONCRETE STRENGTHS SHALL BE VERIFIED BY STANDARD 28-DAY CYLINDER TESTS PER ASTM C39, AND SHALL BE AS FOLLOWS:

4000 PSI

ALL USES

USE

CEMENT SHALL CONFORM TO ASTM C150, TYPE 1. FLY ASH CONFORMING TO ASTM C618, TYPE F OR TYPE C, MAY BE USED TO REPLACE UP TO 20% OF THE CEMENT CONTENT, PROVIDED THAT THE MIX STRENGTH IS SUBSTANTIATED BY TEST DATA. COARSE AGGREGATE SHALL CONFORM TO ASTM C33 WITH A MAXIMUM SIZE OF 3/4". FINE AGGREGATE SHALL BE CLEAN, DURABLE, NATURAL SAND CONFORMING TO ASTM C33

A WATER-REDUCING ADMIXTURE, IF USED, SHALL CONFORM TO ASTM C494 AND USED IN STRICT ACCORDANCE WITH THE MANUFACTURER 'S RECOMMENDATIONS, SHALL BE INCORPORATED IN CONCRETE DESIGN MIXES. A HIGH-RANGE WATER-REDUCING ADMIXTURE CONFORMING TO ASTM C494, TYPE F OR G, MAY BE USED IN CONCRETE MIXES, PROVIDING THAT THE SLUMP DOES NOT EXCEED 8".

SLEEVES, OPENINGS, CONDUIT, AND OTHER EMBEDDED ITEMS NOT SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE APPROVED BY THE STRUCTURAL ENGINEER BEFORE POURING. NO SLEEVE, OPENING, OR INSERT MAY BE PLACED IN BEAMS, JOISTS, OR COLUMNS UNLESS APPROVED BY THE ENGINEER. CONDUITS EMBEDDED IN SLABS SHALL NOT BE LARGER IN OUTSIDE DIMENSION THAN ONE THIRD OF THE THICKNESS OF THE SLAB AND SHALL NOT BE SPACED CLOSER THAN THREE DIAMETERS ON CENTER.

PROVIDE 3/4" CHAMFERS ON ALL EXPOSED CONCRETE EDGES, UNLESS NOTED OTHERWISE. WHERE INDICATED OR REQUIRED, SLOPE CONCRETE SLABS TO DRAINS SHOWN ON PLUMBING AND/OR ARCHITECTURAL DRAWINGS.

ALL CONCRETE SHALL BE CURED IMMEDIATELY AFTER FINISHING OPERATIONS.

REINFORCING STEEL: REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60, FOR DEFORMED BAR AND ASTM A1064 FOR SMOOTH WELDED WIRE FABRIC (WWF), UNLESS OTHERWISE NOTED. REINFORCING STEEL TO BE WELDED SHALL CONFORM TO ASTM A706. REINFORCING STEEL SHALL BE SECURELY TIED IN PLACE WITH #16 ANNEALED IRON WIRE.

ALL DETAILING AND ACCESSORIES SHALL CONFORM TO ACI DETAILING MANUAL SP-66. PROVIDE CHAIRS, SPACERS, BOLSTERS, AND ITEMS IN CONTACT WITH FORMS WITH HOT-DIP GALVANIZED LEGS OR PLASTIC LEGS. ACCURATELY POSITION, SUPPORT, AND SECURE REINFORCEMENT AGAINST DISPLACEMENT BY FORMWORK CONSTRUCTION OR CONCRETE PLACEMENT OPERATIONS. "WET-STICKING" OF REINFORCING IS PROHIBITED.

REQUIRED CONCRETE COVER FOR REINFORCING STEEL (UNLESS NOTED OTHERWISE):

1-1/2" TO STIRRUPS BEAMS

LAP SPLICE CONTINUOUS VERTICAL OR HORIZONTAL BARS IN CONCRETE MEMBERS IN ACCORDANCE WITH ACI 318-19, FOR CLASS "B" TENSION LAP SPLICES. DO NOT SPLICE CONTINUOUS TOP BARS IN BEAMS AT ENDS OF CLEAR SPANS. DO NOT SPLICE CONTINUOUS BOTTOM BARS IN BEAMS IN CLEAR SPANS BETWEEN SUPPORTS. SHOW ALL SPLICES ON SHOP DRAWINGS. SPLICE LOCATIONS AND METHODS SUBJECT TO APPROVAL OF STRUCTURAL ENGINEER.

AT SLAB RE-ENTRANT CORNERS, PROVIDE (2) #5 X 4'-0" DIAGONAL BARS. AT SLAB AND WALL OPENINGS PROVIDE A MINIMUM OF (2) #5 BARS ALL FOUR SIDES AND DIAGONALLY; EXTEND THESE BARS A LAP DISTANCE OR A MINIMUM OF 24" PAST THE OPENING OR HOOK BARS IF DISCONTINUOUS.

DOWEL ALL WALLS AND COLUMNS TO FOOTINGS WITH BAR SIZE AND SPACING TO MATCH VERTICAL REINFORCING UNLESS OTHERWISE SHOWN.

MASONRY WALLS: MASONRY UNITS SHALL MEET ASTM C90, TYPE 2. ASSEMBLIES SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF f'm= 2,000 PSI. MORTAR SHALL BE TYPE "M" OR "S" AND MEET ASTM C270. GROUT SHALL MEET ASTM C476. GROUT STRENGTHS SHALL BE VERIFIED BY STANDARD 28-DAY TESTS PER ASTM C1019. GROUT SHALL CONSIST OF A MIXTURE OF CEMENTITIOUS MATERIALS AND AGGREGATE TO WHICH SUFFICIENT WATER HAS BEEN ADDED TO CAUSE THE MIXTURE TO FLOW WITHOUT SEGREGATION OF THE CONSTITUENTS. ALL CELLS CONTAINING VERTICAL BARS, BOND BEAMS, AND ALL CELLS BELOW GRADE SHALL BE FILLED WITH GROUT. MAXIMUM HEIGHT OF GROUT POUR ALLOWED IS 4'-0" UNLESS CLEAN-OUT OPENING IS PROVIDED AT BOTTOM OF CELLS TO BE FILLED. LOCATE CLEAN-OUT OPENINGS IN AREAS NOT EXPOSED TO VIEW.

UNLESS NOTED OTHERWISE EIGHT INCH MASONRY WALLS SHALL BE PARTIALLY REINFORCED MASONRY WALL CONSTRUCTION WITH #5 AT 48 INCH O.C. IN GROUT FILLED CELLS. ADD (1) #5 REINFORCING BAR EACH SIDE OF OPENINGS EXCEEDING 3 FEET.

PROVIDE REINFORCING BARS AT CORNERS, INTERSECTIONS, AND EACH SIDE OF OPENINGS. PROVIDE (2) REINFORCING BARS EACH SIDE OF OPENINGS OVER 4 FEET WIDE, AND AS SHOWN ON THE PLANS. PROVIDE HOOKED DOWELS INTO FOOTINGS AND STRUCTURE ABOVE AND/OR BELOW TO PROVIDE CONTINUITY. PROVIDE 9 GAGE GALVANIZED HORIZONTAL JOINT REINFORCING (DUR-O -WAL OR ENGINEER-APPROVED EQUAL) AT 16" O.C. REINFORCING LAPS TO BE 48 BAR DIAMETERS.

DO NOT PLACE CONDUITS, PIPES, ETC., IN CELLS WITH VERTICAL REINFORCING. DO NOT RUN CONDUITS, PIPES, ETC., HORIZONTALLY IN CMU WALLS PARALLEL TO LENGTH OF WALL. WHERE MASONRY WALLS ABUT CONCRETE COLUMNS TO BE PLACED PRIOR TO ERECTION OF MASONRY WALLS, PROVIDE DOVETAIL SLOTS BETWEEN COLUMN AND WALLS AND GROUT THE CMU CELL CONTAINING THE DOVETAIL ANCHORS. OTHERWISE, EXTEND CMU HORIZONTAL JOINT REINFORCING THROUGH CONCRETE COLUMN.

CONTROL JOINTS SHALL BE PROVIDED IN ALL CONCRETE MASONRY CONSTRUCTION AT A SPACING NOT TO EXCEED THREE TIMES WALL HEIGHT OR 30'-0" MAXIMUM. COORDINATE LOCATIONS WITH THE ARCHITECTURAL DRAWINGS. HORIZONTAL WALL REINFORCING SHALL BE STOPPED EACH SIDE OF CONTROL JOINTS. SEE ARCHITECTURAL DRAWINGS FOR SEALANT REQUIREMENTS AT CONTROL JOINTS.

USE METAL LATH OR WIRE SCREEN FOR CAVITY CAPS. SHEET METAL, FELT, BUILDING PAPER, OR LIKE MATERIALS ARE PROHIBITED.

TIE BEAMS: TIE BEAMS SHALL BE CONCRETE, POURED AFTER THE BLOCK WALLS BELOW ARE IN PLACE. REINFORCING SHALL BE CONTINUOUS THROUGH TIE BEAMS WITH MINIMUM LAP SPLICES OF 48 BAR DIAMETERS AND BENT BARS AT CORNERS. USE METAL LATH, MORTAR, OR SPECIAL UNITS TO CONFINE CONCRETE TO AREA REQUIRED, IN ACCORDANCE WITH ACI 530.1, SECTION 3.5 B. SOLID METAL OR FELT CAVITY CAPS ARE PROHIBITED

PRECAST CONCRETE LINTELS: UNLESS INDICATED OTHERWISE, ALL LINTELS TO BE "U" TYPE PRECAST CONCRETE UNITS EQUAL TO UNITS MANUFACTURED BY CAST-CRETE CORP. AND PRESTRESSED (AND ADDITIONALLY REINFORCED AS REQUIRED) IN ACCORDANCE WITH CAST -CRETE CORP. "DESIGN MANUAL", LATEST EDITION, FOR THE SPAN AND LOADING CONDITION RELATIVE TO LINTEL LOCATION.

LINTEL SIZE IF NOT SHOWN ON THE PLANS SHALL BE 8F8-1B FOR OPENINGS LESS THAN 10 FEET AND 8F16-1B/1T FOR OPENINGS 10 FEET TO 20 FEET. PROVIDE 8" MINIMUM BEARING FOR LINTELS UNLESS NOTED OTHERWISE.

SAWN LUMBER: SAWN LUMBER SHALL BE SOUTHERN PINE #2 WITH THE ALLOWABLE FIBER STRESSES PER THE AWC NATIONAL DESIGN SPECIFICATION.

ALL LUMBER EXPOSED TO WEATHER SHALL BE PROTECTED OR PRESSURE TREATED. ALL LUMBER IN CONTACT WITH CONCRETE OR MASONRY SHALL BE PROTECTED OR PRESSURE TREATED.

ALL FRAMING NAILS SHALL BE COMMON NAILS AND SHALL BE OF THE SIZE AND NUMBER INDICATED ON THE DRAWINGS. NAILING NOT SHOWN SHALL BE AS INDICATED IN TABLE 2304.10.1 OF THE FBC. BOLTS AND LAG SCREWS SHALL CONFORM TO ANSI/ASME STANDARD B18.1. ALL BOLTS AND LAG SCREWS SHALL BE INSTALLED WITH STANDARD CUT WASHERS.

WOOD FRAMING CONNECTORS: FRAMING ACCESSORIES AND STRUCTURAL FASTENERS SHALL BE MANUFACTURED BY SIMPSON COMPANY (OR APPROVED EQUAL) AND OF THE SIZE AND TYPE SHOWN ON THE DRAWINGS. HANGERS NOT SHOWN SHALL BE SIMPSON HU OF SIZE RECOMMENDED FOR MEMBER. ALL CONNECTORS SHALL BE STAINLESS STEEL. UNLESS SHOWN OTHERWISE, INSTALL MAXIMUM SIZE AND NUMBER OF FASTENERS SHOWN IN LATEST SIMPSON CATALOG.

MULTIPLY WOOD BEAMS: HEADERS AND LEDGERS LOADED FROM TOP SHALL BE CONNECTED TOGETHER WITH 2 ROWS SIMPSON SDW SCREWS AT 16" OC THROUGH ALL PLYS WITH 1 3/8" MINUMUM EMBEDMENT. HEADERS AND LEDGERS LOADED BY FACE-MOUNTED BUCKETS SHALL BE CONNECTED TOGETHER AS FOLLOWS: 2X6 AND 2X8 CONNECTED TOGETHER WITH 2 ROWS SIMPSON SDW SCREWS AT 12 " OC, 2X10 AND 2X12 CONNECTED TOGETHER WITH 3 ROWS SIMPSON SDW SCREWS AT 12 " OC.

SDW SCREWS SHALL BE INSTALLED WITH 1 1/2" EDGE DISTANCE, 6" END DISTANCE, AND 4" MINIMUM CENTER TO CENTER.

PLYWOOD: PLYWOOD PANELS SHALL CONFORM TO THE REQUIREMENTS OF "U.S. PRODUCT STANDARD PS-1 FOR CONSTRUCTION AND INDUSTRIAL PLYWOOD" OR APA PRP-108 PERFORMANCE STANDARDS. UNLESS OTHERWISE NOTED, PANELS SHALL BE APA RATED SHEATHING, EXPOSURE 1, OF THE THICKNESS AND SPAN RATING SHOWN ON THE DRAWINGS.

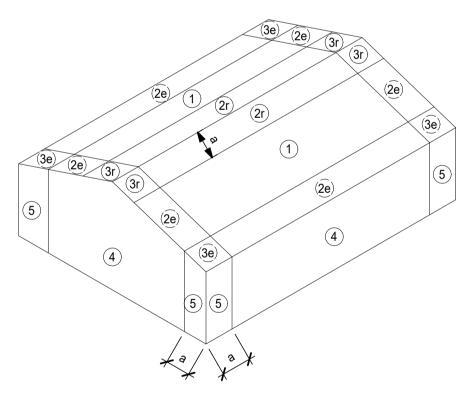
PLYWOOD INSTALLATION SHALL BE IN CONFORMANCE WITH APA RECOMMENDATIONS. ALLOW 1/8 "SPACING AT PANEL EDGES, UNLESS OTHERWISE RECOMMENDED BY THE PANEL MANUFACTURER.

ALL SHEATHING SHALL BE INSTALLED WITH FACE GRAIN PERPENDICULAR TO SUPPORTS, EXCEPT AS INDICATED ON THE DRAWINGS. STAGGER ENDS OF ADJACENT PANELS 4'-0".

ROOF SHEATHING SHALL BE 3/4" PLYWOOD, BLOCKED, TONGUE-AND-GROOVE, OR HAVE EDGES SUPPORTED BY PLYCLIPS. ATTACH PLYWOOD PANELS TO SUPPORTING MEMBERS WITH 10d RINGSHANK NAILS SPACED 4" ON CENTER ALONG THE PANEL EDGES AND AT 6" ON CENTER ALONG INTERMEDIATE SUPPORTS, UNLESS NOTED OTHERWISE.

SOFFITS: SOFFITS SHALL BE CAPABLE OF RESISTING THE DESIGN PRESSURES FOR WALLS SPECIFIED IN THE COMPONENT AND CLADDING CHART. SOFFITS SHALL BE CONSTRUCTED WITH 2x4 AT 24" OC WITH 1/2" PLYWOOD WITH 8d @ 4" OC EDGES AND 6" OC FIELD OR PER FLORIDA PRODUCT APPROVAL.





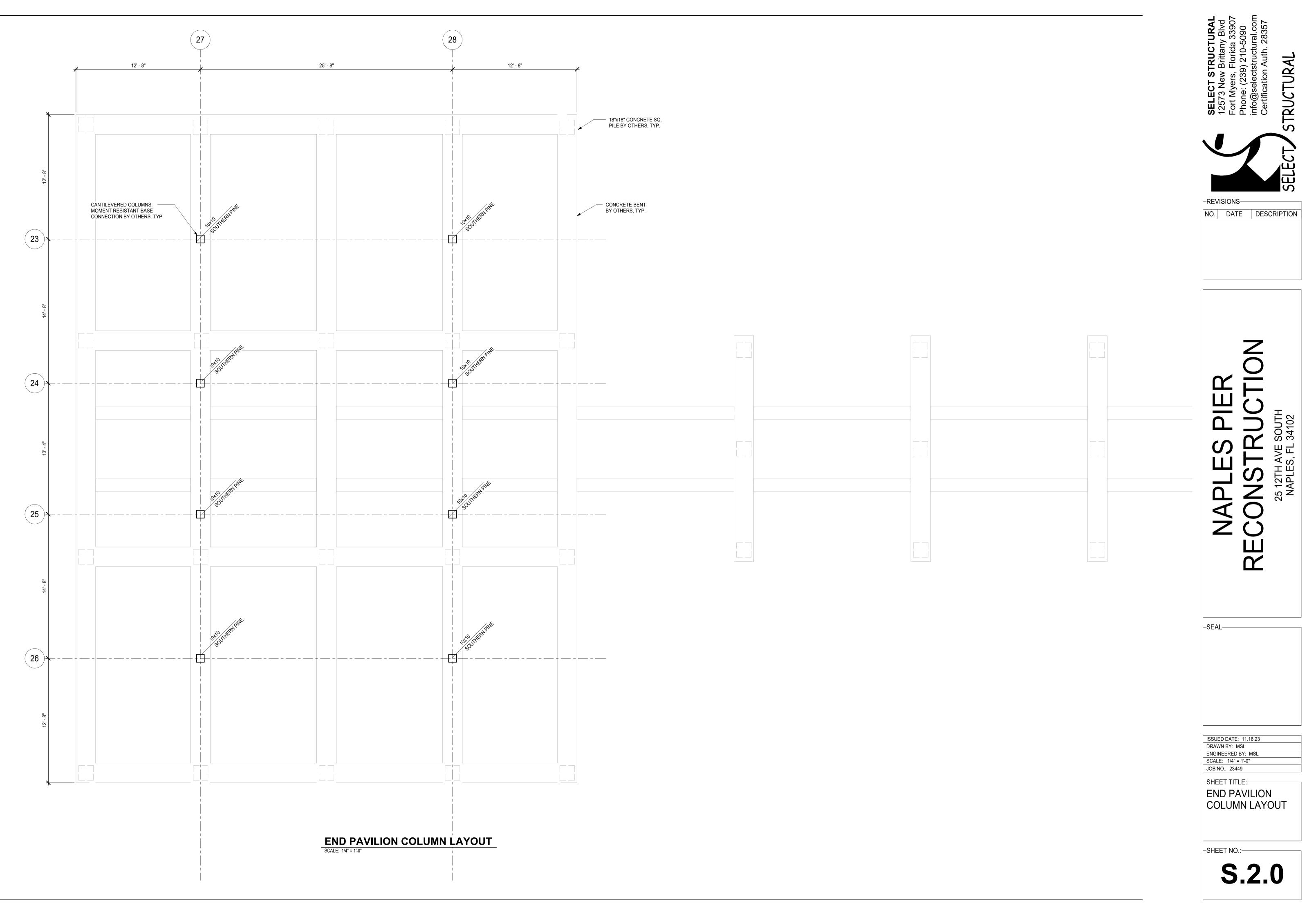
GABLE ROOF

ALLOWABLE COMPONENT & CLADDING WIND PRESSURES (PSF)							
ZONE		TRIBUTARY AREA					
		36 SQ FT	144 SQ FT	300 SQ FT			
	INTERIOR	1	34 / -25	34 / -25	34 / -25		
ROOF F	RIDGE/EDGE	2	52 / -37	52 / -37	34 / -25		
(CORNER	3	68 / -49	52 / -37	34 / -25		

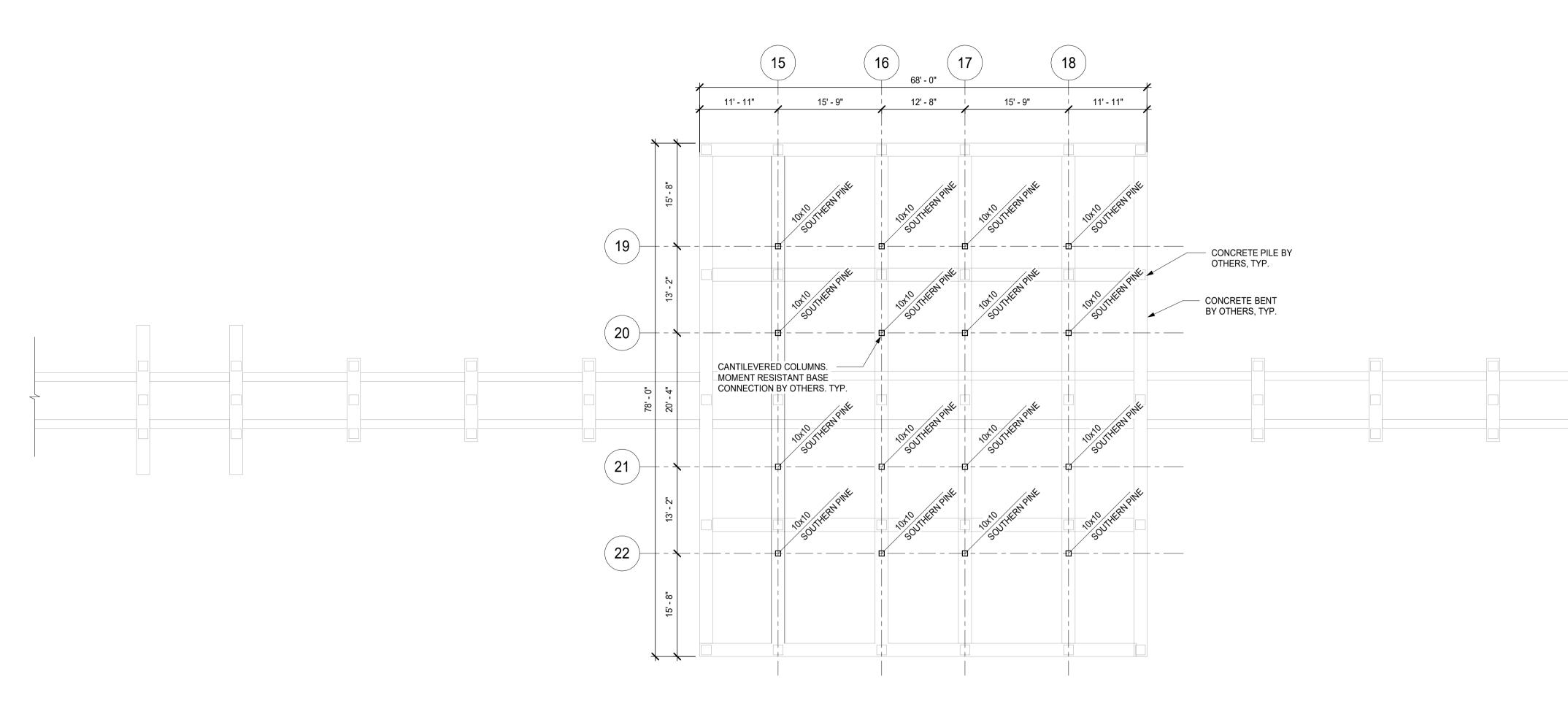
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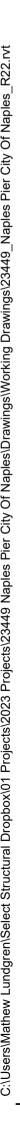


SCALE: NOT TO SCALE



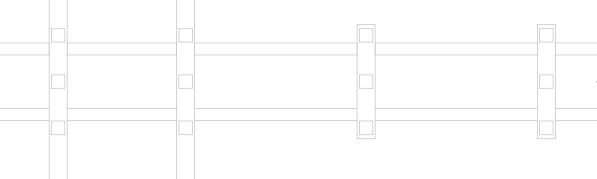
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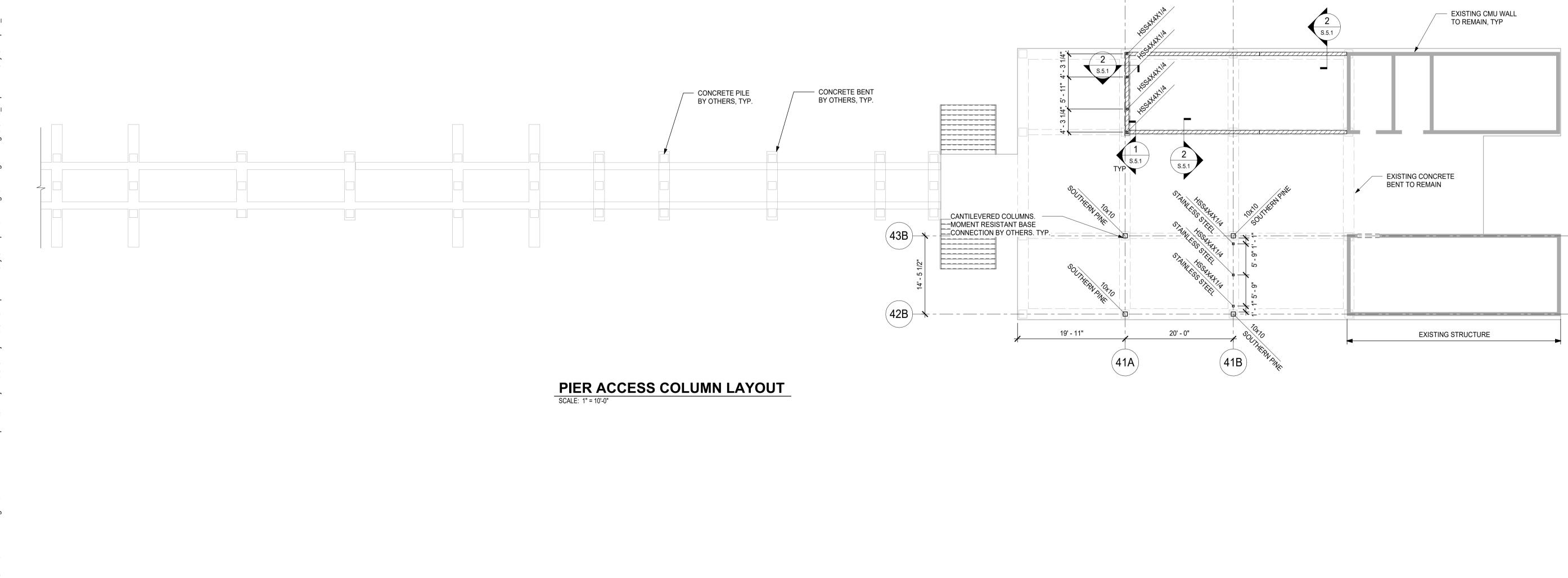




MID PAVILION COLUMN LAYOUT SCALE: 3/32" = 1'-0"

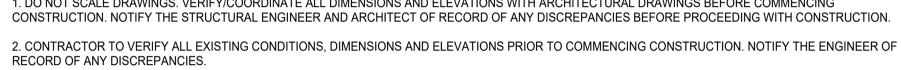




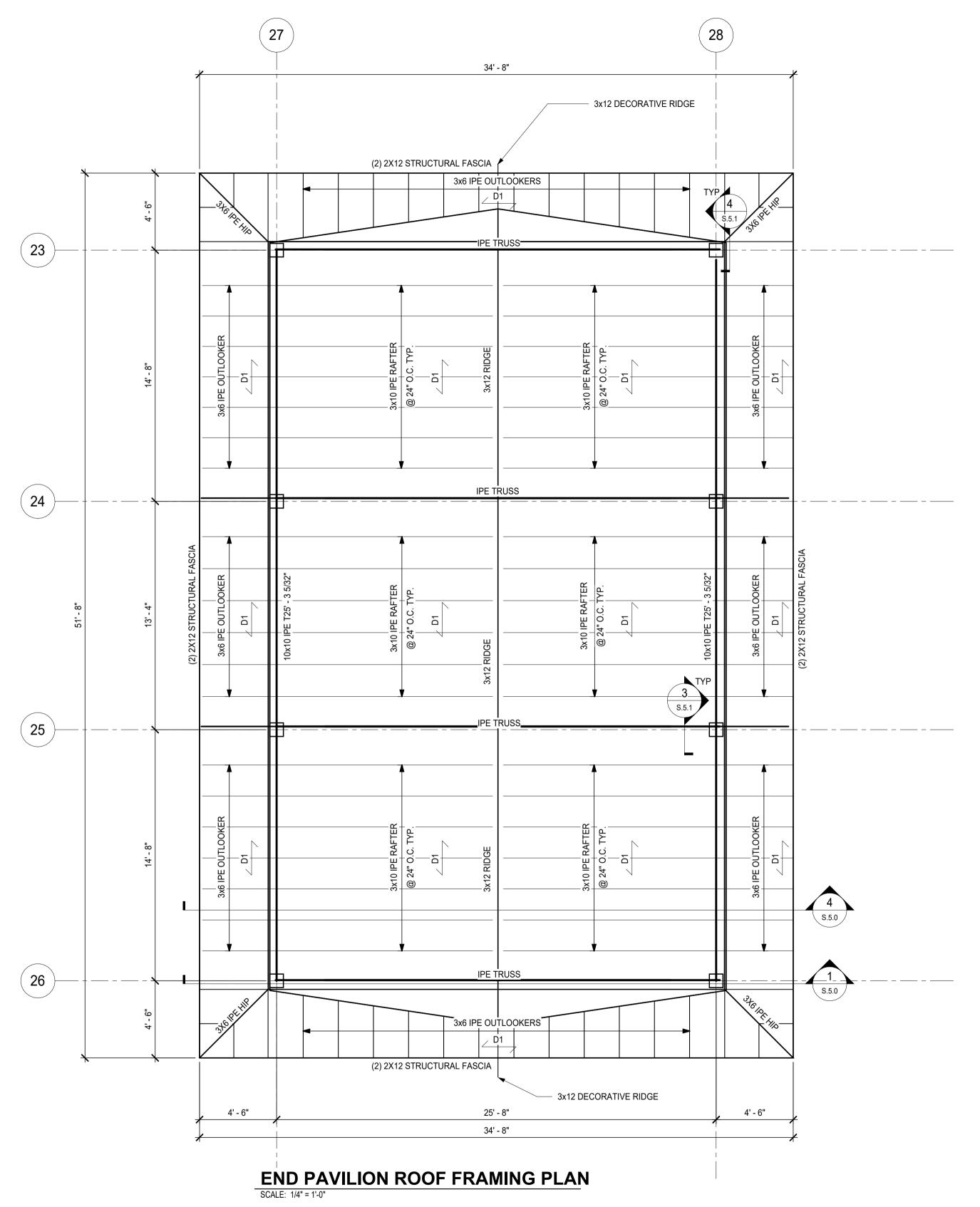


RECORD OF ANY DISCREPANCIES. 3. INDICATES 8" CMU WALLS W/ #5 VERTICALS AT 48" OC MAX, AND AT CORNERS, INTERSECTIONS AND BOTH SIDES OF OPENINGS, UNLESS NOTED OTHERWISE.

FOUNDATION PLAN NOTES: 1. DO NOT SCALE DRAWINGS. VERIFY/COORDINATE ALL DIMENSIONS AND ELEVATIONS WITH ARCHITECTURAL DRAWINGS BEFORE COMMENCING CONSTRUCTION. NOTIFY THE STRUCTURAL ENGINEER AND ARCHITECT OF RECORD OF ANY DISCREPANCIES BEFORE PROCEEDING WITH CONSTRUCTION.







ROOF FRAMING PLAN NOTES

- 1. REFER TO ARCHITECTURAL DRAWINGS FOR ROOF SLOPES AND ACCESS HATCH LOCATIONS.
- 2. COORDINATE LOCATION OF MECHANICAL EQUIPMENT AND OPENINGS NOT SHOWN ON PLAN.

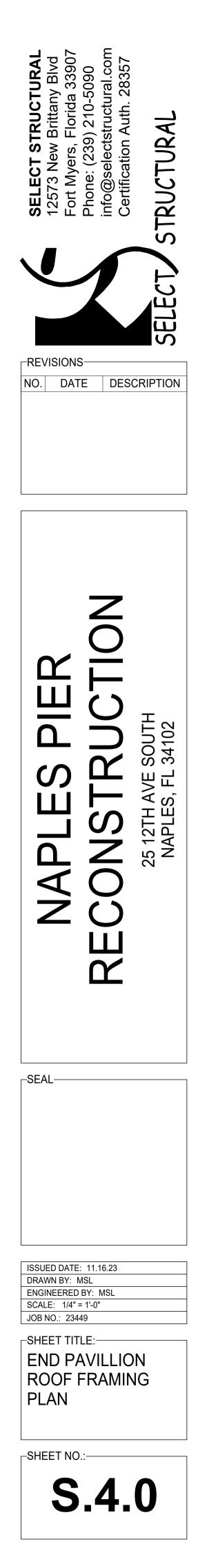
3. TX'-X" INDICATES TOP OF BEAM ELEVATION.

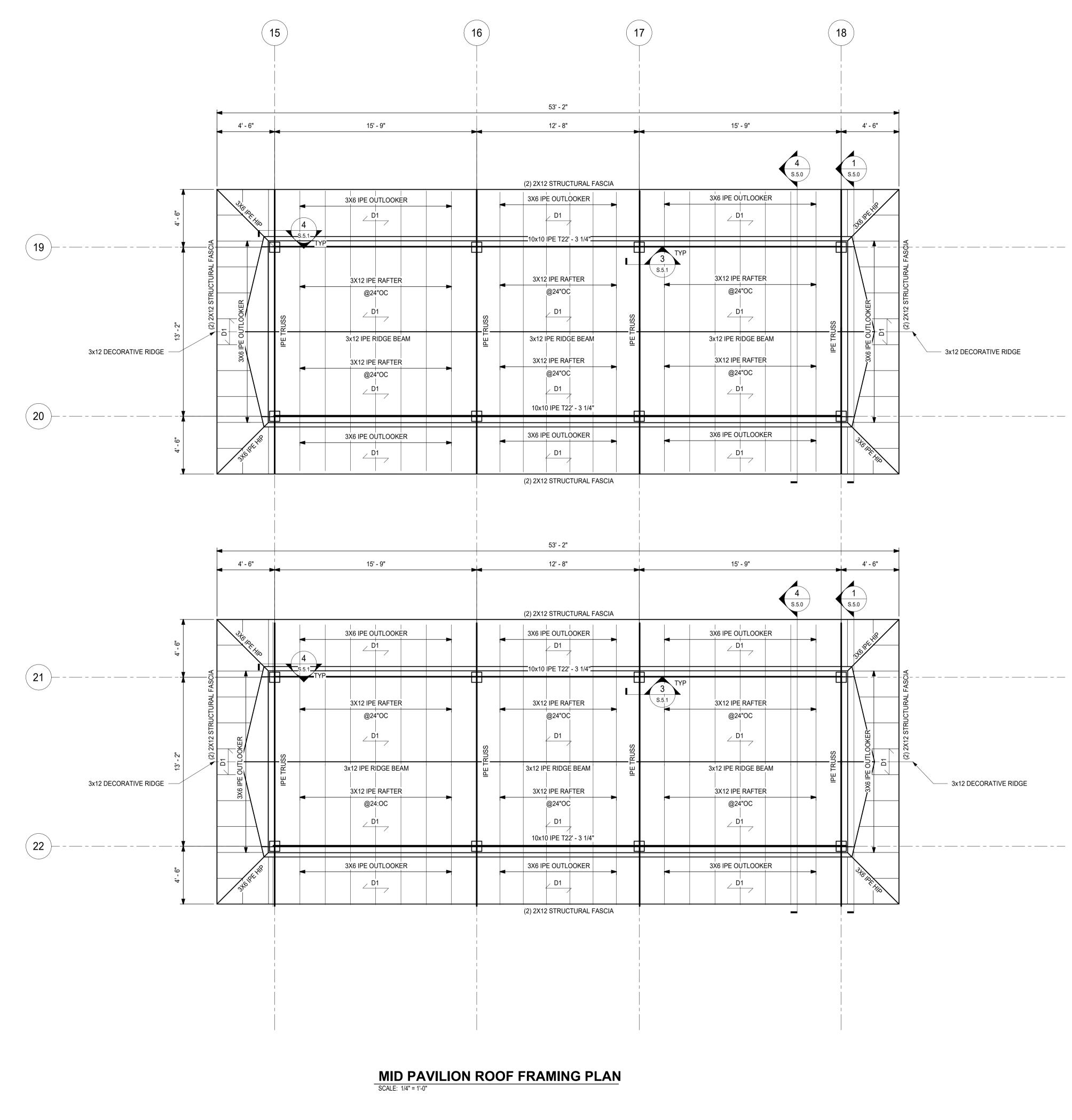
4. _ D1 INDICATES 1x6 T&G DECKING (SEE ARCH FOR REQUIREMENTS) AND 3/4" PLYWOOD SHEATHING W/ 10d RINGSHANK NAILS AT 4" OC AT PANEL EDGES AND 6" OC AT INTERMEDIATE SUPPORTS, UNLESS NOTED OTHERWISE.

5. _ D2 INDICATES 3/4" PLYWOOD SHEATHING W/ 10d RINGSHANK NAILS AT 4" OC AT PANEL EDGES AND 6" OC AT INTERMEDIATE SUPPORTS, UNLESS NOTED OTHERWISE.

6. PROVIDE CONTINUOUS UNINTERRUPTED ROOF SHEATHING UNDER OVER-BUILDS.

7. SEE ARCHITECTURAL DRAWINGS FOR FIREPROOFING REQUIREMENTS FOR THE ROOF SYSTEM.









NO. DATE DESCRIPTION

ROOF FRAMING PLAN NOTES

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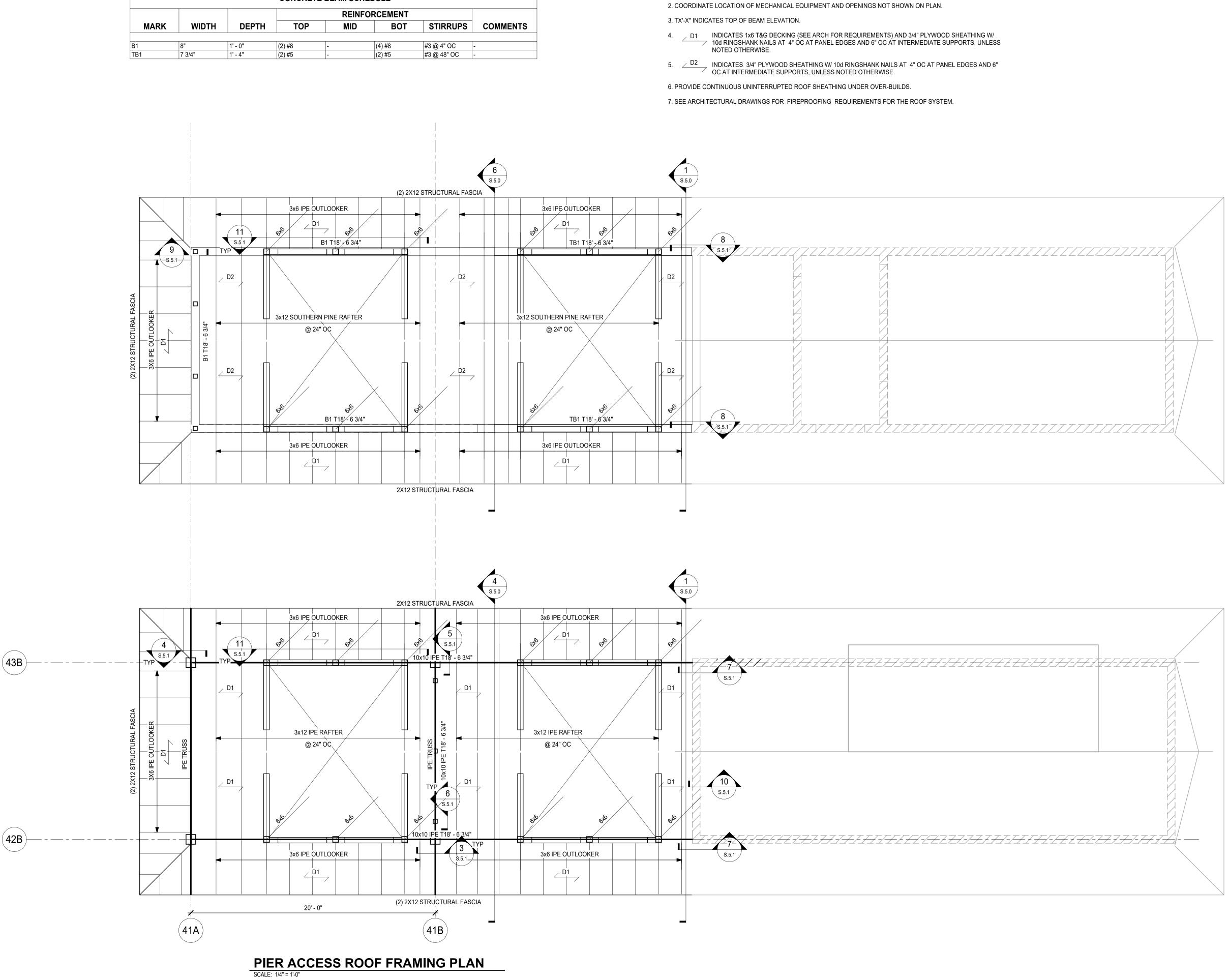
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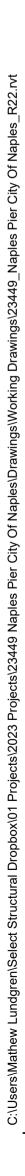


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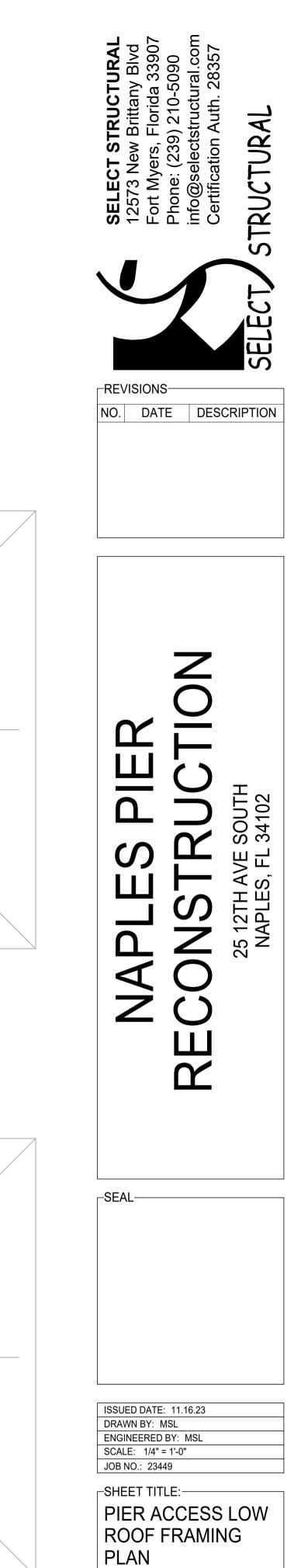




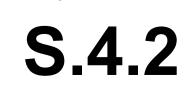
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ROOF FRAMING PLAN NOTES

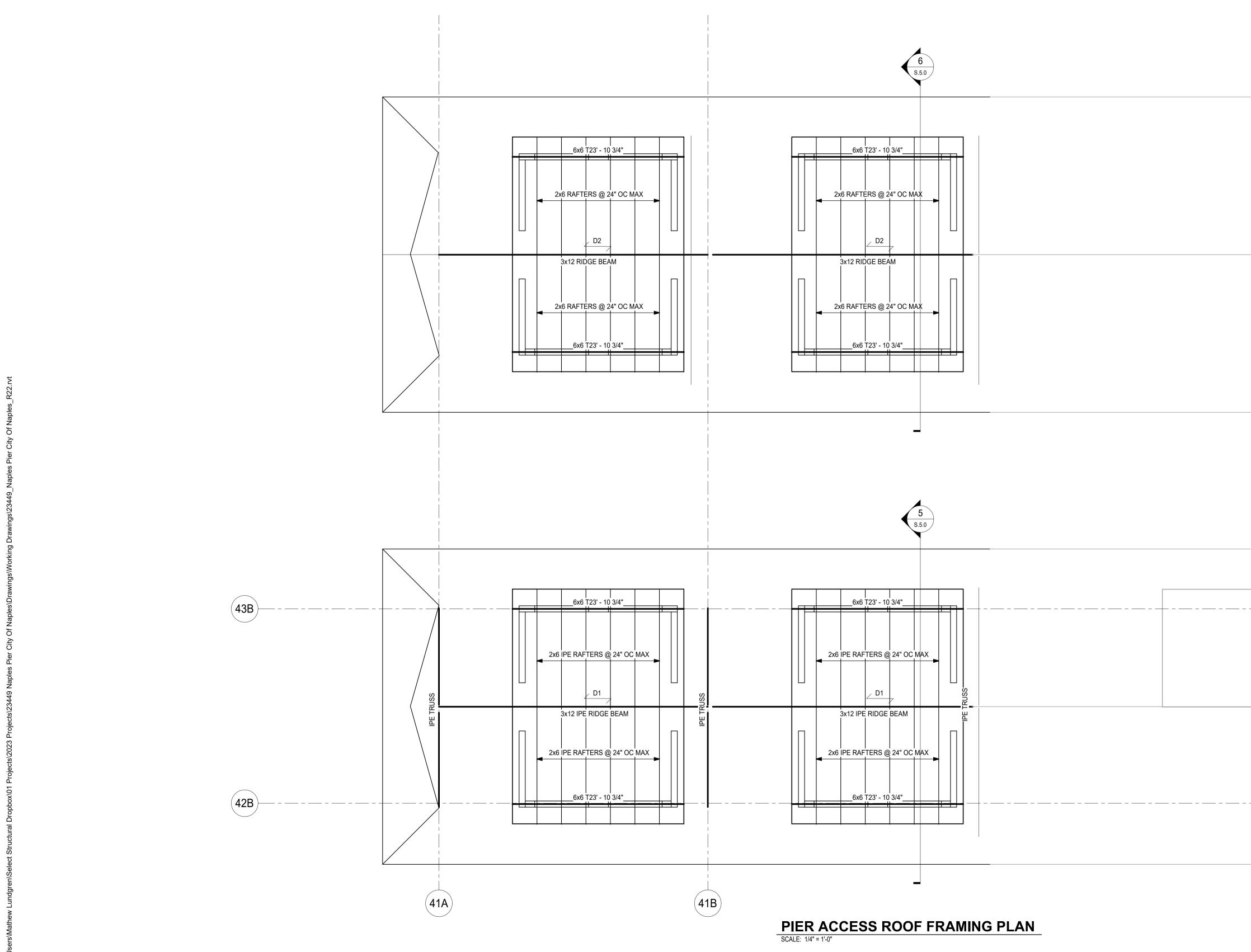
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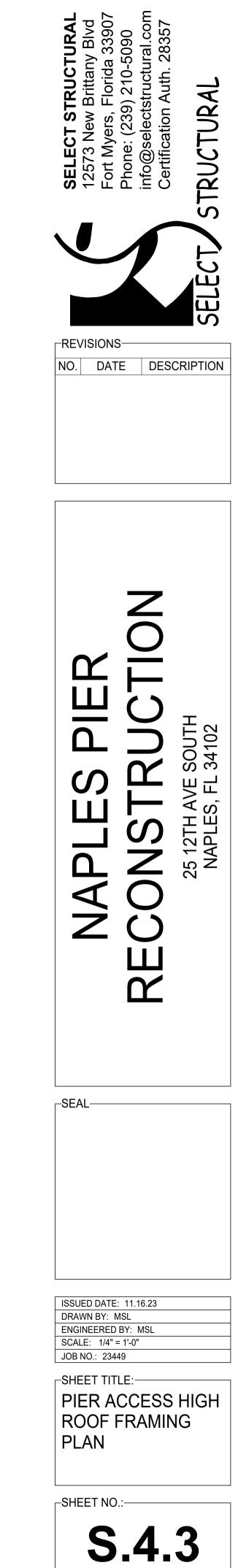


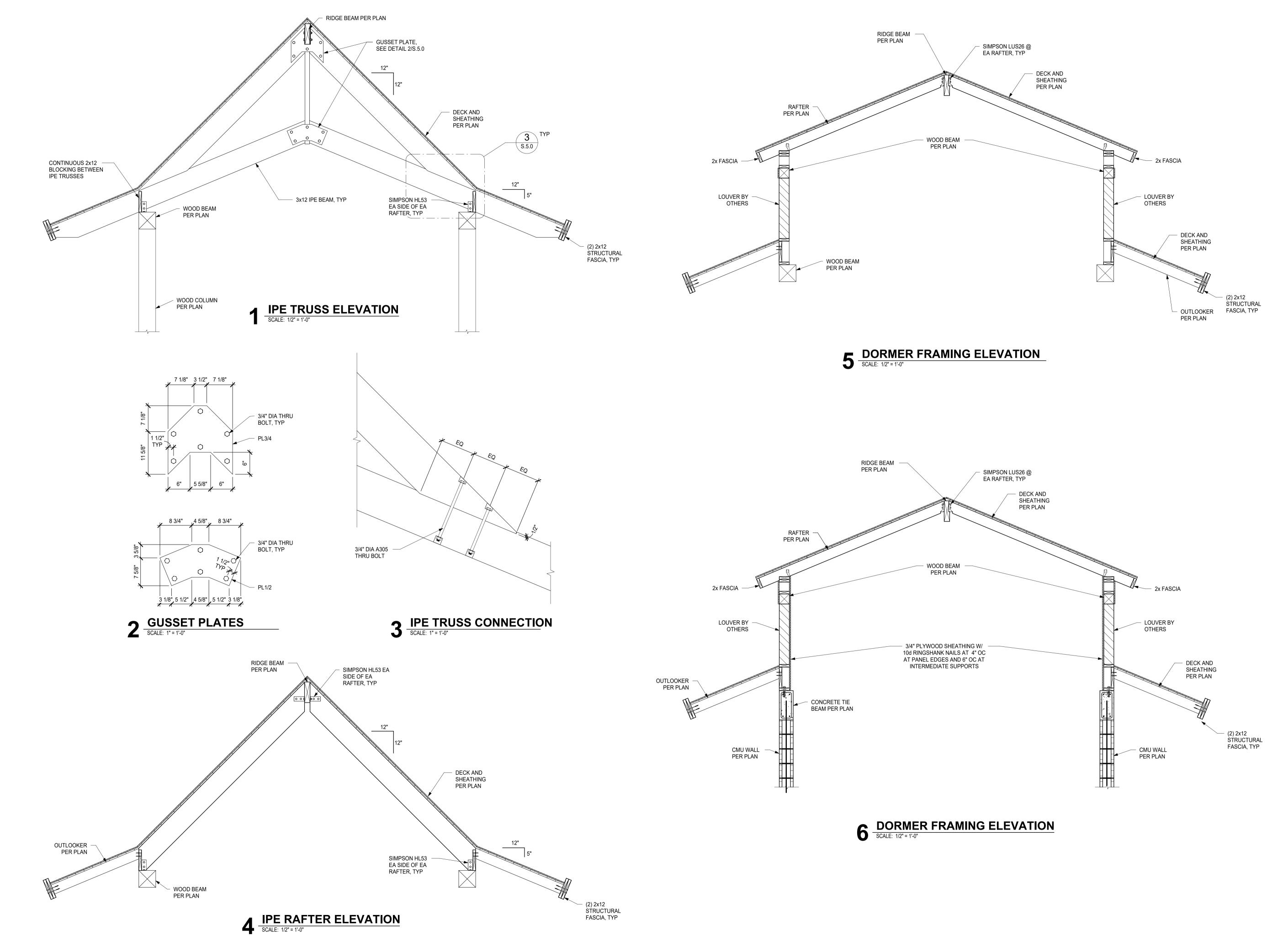


ROOF FRAMING PLAN NOTES

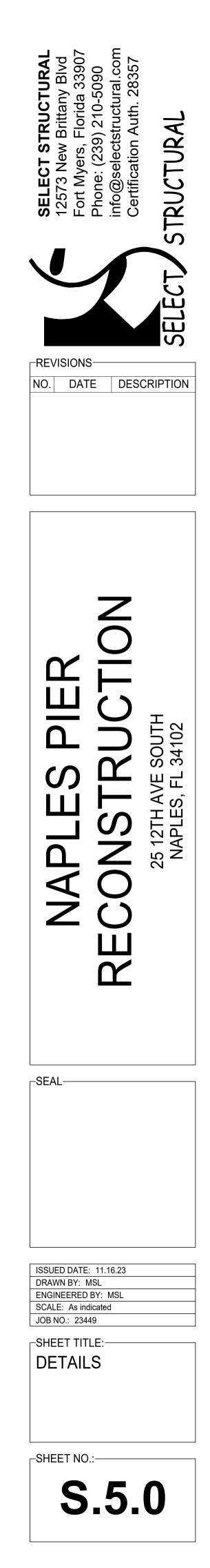
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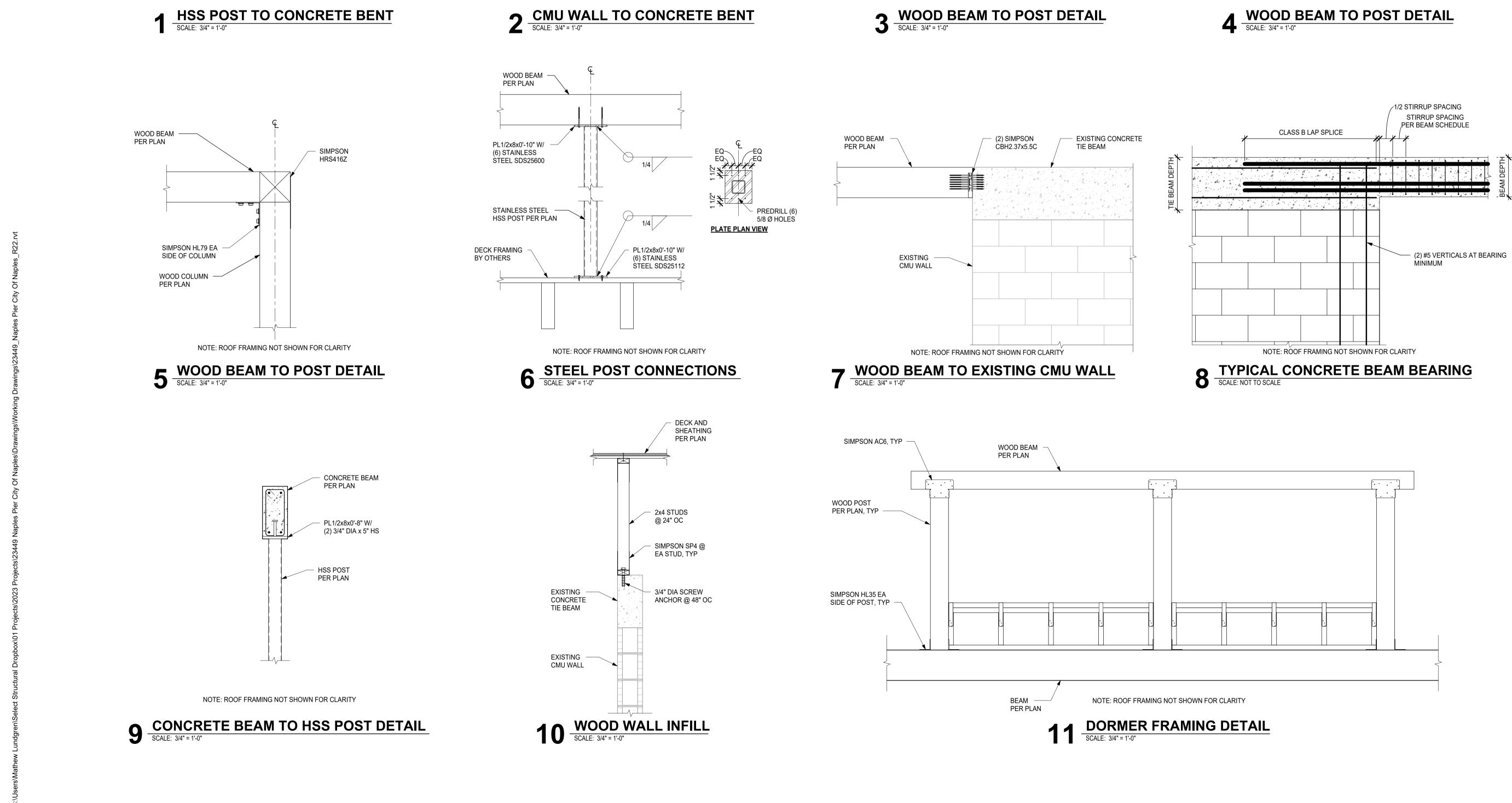
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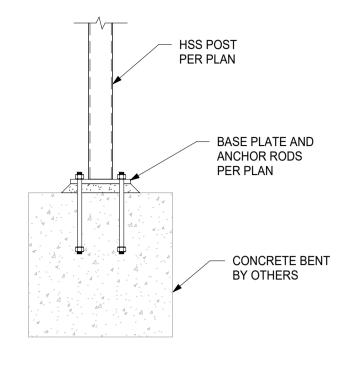


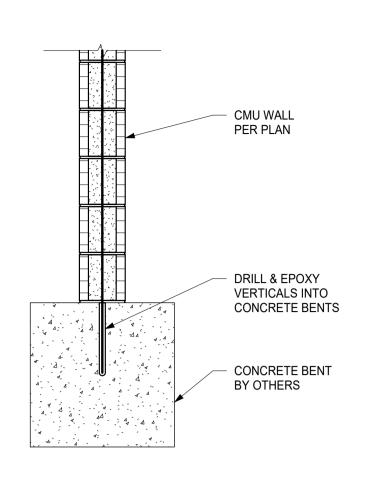


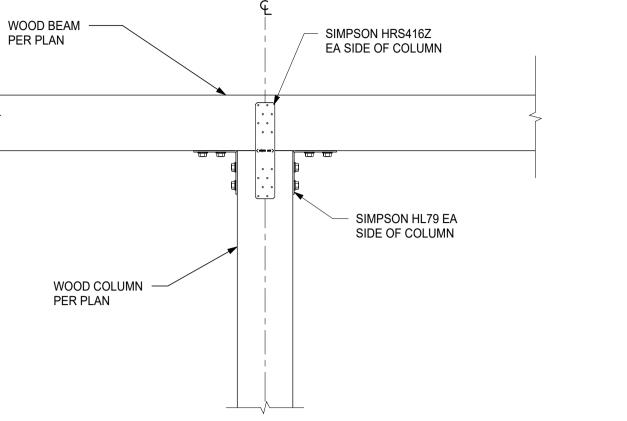






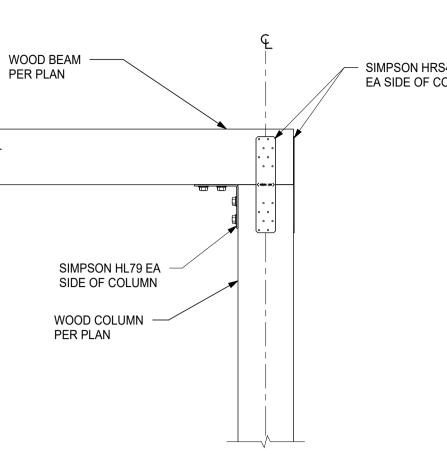






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GEOTECHNICAL ENGINEERING REPORT



City of Naples Pier Replacement 25 12th Avenue South

Naples, Florida

PREPARED FOR: Turrell Hall & Associates Inc. 3584 Exchange Avenue B Naples, Florida 34104

NOVA Project Number: 10106-2022029

October 18, 2023





October 18, 2023

Mr. Tim Hall **Turrell Hall & Associates Inc.** 3584 Exchange Avenue B Naples, Florida 34104

Subject: Report of Subsurface Exploration and Geotechnical Engineering City of Naples Pier Replacement 25 12th Avenue South Naples, Florida NOVA Project Number 10106-2022029

Dear Mr. Hall:

NOVA Engineering and Environmental, LLC (NOVA) has completed the authorized subsurface exploration and geotechnical engineering evaluation for the subject project. The work was performed in general accordance with NOVA Proposal Number 006-20237137 dated January 27, 2023 and authorized by you on April 26, 2023. This report discusses our understanding of the project at the time of the subsurface exploration, describes the geotechnical consulting services provided by NOVA, and presents our findings, conclusions, and recommendations.

We appreciate your selection of NOVA and the opportunity to be of service on this project. If you have any questions, or if we may be of further assistance, please do not hesitate to contact us.

Sincerely, NOVA Engineering and Environmental, LLC



Andres F. Alberdi, P.E. Senior Engineer Florida P.E. License No. 42449

James W. Niehoff, P.E. Senior Geotechnical Engineer Florida P.E. License No.

PROFESSIONAL | PRACTICAL | PROVEN 4524 Oak Fair Blvd, Suite 200, Tampa, Florida 33610 t. 813.623.3100 / f. 813.623.3545 / usanova.com

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1.0 INTRODUCTION

1.1 NAME AND LOCATION OF PROJECT

The City of Naples Pier is located at 25 12th Avenue South in Naples, Florida. The pier was originally built in 1888 and has been rebuilt after hurricanes in 1910, 1926, 1944 and 1960. In 2015 the pier was reconstructed and damaged by Hurricane Irma in 2017 with subsequent piling repairs until Hurricane Ian caused catastrophic damage to the pier in 2022. The significant damage included the western 460 feet with the final 140 feet at the end collapsed into the Gulf of Mexico. The concession, shelter and storage structures located near the midpoint of the pier were also severely damaged.

1.2 AUTHORIZATION AND SCOPE OF STUDY

The current work was performed in general accordance with NOVA Proposal Number 006-20237137 dated January 27, 2023 and authorized by you on April 26, 2023. This report discusses our understanding of the project, including our exploratory procedures, and presents our findings, conclusions, and recommendations.

The primary objectives of our study was to evaluate the subsurface conditions along the alignment of the pier and to assess these findings as they relate to geotechnical aspects associated with the replacement of the pier. The authorized geotechnical engineering services included a site reconnaissance, a soil test boring program with Standard Penetration Testing (SPT borings), in-situ testing and engineering evaluation of the collected data, plus the preparation of this report. The services were performed substantially as outlined in our proposal and in general accordance with industry standards. As authorized per the referenced proposals, the completed geotechnical report was to include:

- A description of the site, fieldwork, and general soil conditions encountered, as well as a Boring Location Plan and individual Test Boring Records.
- A discussion of geologic conditions for the subject area based upon available information.
- Discussion of potential construction-related issues indicated by the exploration, such as materials that would require difficult pile installation, etc.
- Available compression, tension and lateral pile capacity based on provided loading and pile head deflections conditions.
- Recommendations for quality control measures (i.e., sampling, testing, and inspection requirements) for pile foundation construction.



The assessment of site environmental conditions, including the detection of pollutants in the soil, rock or groundwater, laboratory testing of samples was beyond the scope of this geotechnical study. If requested, NOVA can provide these services.

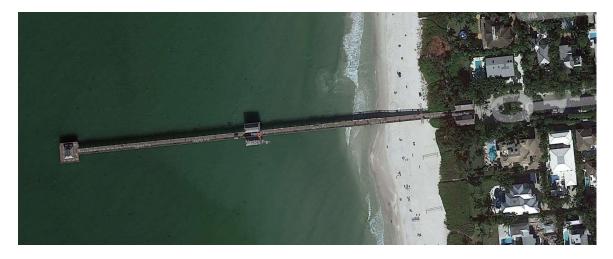
2.0 PROJECT INFORMATION

2.1 SITE PLANS AND DOCUMENTS

Our understanding of the project is based on Naples Pier Design – Request for Proposal and Solicitation Number 23-009 dated January 9, 2023, email correspondence, plus bathymetric data and other research.

2.2 PROJECT SITE

The subject property is located within a residential neighborhood at the terminus 25 $12^{\rm th}$ Avenue South and the Gulf of Mexico.



2.3 PROPOSED RECONSTRUCTION

According to the information provided to us, the replacement pier may be architecturally similar to the previous pier. Structurally, the pier will include prestressed concrete piling and concrete piers with timber stringers and decking. Below are images of what a portion of the pier with the midpoint pavilions will look like.









Structural loading details were provided by Osborn Engineering with wave modeling and scour/erosion analyses produced by Humiston & Moore Engineers.

3.0 SUBSURFACE EXPLORATION

3.1 AREA GEOLOGY

The "Soil Survey of Collier County, Florida", published by the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS), was reviewed for general near-surface soil information within the general vicinity of the subject project. The land/beach area of the site is covered with Canaveral-Beaches complex. The shallow soil map unit characteristics are discussed below.

3.1.1 Canaveral-Beaches complex

Canaveral soil has a surface layer of dark brown fine sand about 4 inches thick. The substratum is brown to light gray fine sand mixed with shell fragments to a depth of about 80 inches. In inland areas, the seasonal high water table is typically at a depth of 18 to 36 inches for 1 to 6 months. During the other months, the water table is below a depth of 40 inches. The soil is also subjected to tidal flooding under severe weather conditions.

3.2 REGIONAL GEOLOGY

The subject site is located in a geologic setting that includes thinly covered carbonate bedrock (limestone), which is conducive to solution weathering when subjected to slightly acidic groundwater over geologic periods. The rock surface in such karst geology can be pinnacled, slotted and may contain solution cavities. The site is in Area I in Florida, implying that broad, shallow solution sinkholes dominate, according to the Florida Geological Survey.



City of Naples

Based on our review of aerial photographs and the Sinkhole Map from the Florida Department of Environmental Protection, mapped sinkhole activities are not prevalent within the surrounding area. Published mapping and site observations do not currently indicate the presence of on-site sinkhole activity that has migrated to the ground surface.

Regardless of the thoroughness of a subsurface exploration, the potential for future settlements or loss of structural support as a result of solution weathering of the underlying carbonate rock and resulting sinkhole development is present within the subject site and in this region of Florida, and the owner must accept the inherent risks associated with building in this geologic area.

3.3 FIELD EXPLORATION

The geotechnical study utilized two different drill rigs for the landside borings and the waterside borings. The landside boring locations were accessed with a limited access, track mounted drill rig from the boardwalk connecting entry to the beach. The water borings were performed with drilling equipment mounted on a spud barge. The approximate boring locations are shown on the Boring Location Plan in Appendix A of this report.

Our field explorations were conducted in June 2023 and consisted of a total of six Standard Penetration Test (SPT) soil borings advanced to a nominal depth below existing grade and barge deck of 60 feet to 90 feet.

3.3.1 Standard Penetration Test Borings

The soil test borings were performed using the guidelines of ASTM Designation D-1586, "Penetration Test and Split-Barrel Sampling of Soils". A mud rotary drilling process was used to advance the borings. At regular intervals, soil samples were obtained with a standard 1.4-inch I.D., 2.0-inch O.D., split-tube sampler. The sampler was first seated six inches and then driven an additional foot with blows of a 140-pound automatic hammer falling 30 inches. The number of hammer blows required to drive the sampler the final foot is designated the "Penetration Resistance". The penetration resistance, when properly interpreted, is an index to the soil strength and density. Representative portions of the soil samples, obtained from the sampler, were placed in containers, and transported to our laboratory for further evaluation and laboratory testing. The boreholes were tremie grouted with cement and bentonite.

Test Boring Records in Appendix B of this report show the standard penetration test (SPT) resistances, or "N-values", and present the soil conditions encountered in the borings. These records represent our interpretation of the subsurface



conditions based on the field exploration data, visual examination of the splitbarrel samples, laboratory test data, and generally accepted geotechnical engineering practices. The stratification lines and depth designations represent approximate boundaries between various subsurface strata. Actual transitions between materials may be gradual.

3.3.2 Groundwater and Water Conditions

The groundwater levels from the landside borings and reported on the Test Boring Records represent measurements made at the time of drilling. Seasonal groundwater level fluctuations should be anticipated as a result of rainfall and tides. The depth to the mudline below the barge deck was recorded for the water borings.

3.4 SOIL CLASSIFICATION

Soil classification provides a general guide to the engineering properties of various soil types. In our explorations, samples obtained during drilling operations were observed in our laboratory and visually classified by an engineer. The soils are classified according to relative density or consistency (based on number of blows from standard penetration tests), color and texture. These classification descriptions are included on our Test Boring Records. The classification system discussed above is primarily qualitative; laboratory testing is generally performed for detailed soil classification. The soils were classified using the Unified Soil Classification System. This classification system and the in-place physical soil properties provide an index for estimating the soil's behavior. The soil classification and physical properties obtained are presented in this report.

All soil samples will be properly disposed of following the submittal of this NOVA subsurface exploration report unless you request otherwise.

3.5 SUBSURFACE CONDITIONS

The following paragraphs provide generalized descriptions of the subsurface profiles and soil conditions encountered by the boring conducted during this study. The Test Boring Records in Appendix B of this report should be reviewed to provide more detailed descriptions of the subsurface conditions encountered at each boring location. These records represents our interpretation of the subsurface conditions based on the field records and visual observations of collected samples by an engineer. The lines designating the interface between various strata on the Boring records represent the approximate interface locations and elevation. The actual transition between strata may be gradual. It should be understood that soil conditions may vary at other unexplored locations.



3.5.1 Landside Borings

The landside borings encountered primarily medium dense to dense, fine SANDS with some shell extending below the land surface to a nominal depth of about 27 feet (LB-2) and 47 feet (LB-1).

In Boring LB-1, the upper fine SANDS were underlain by medium dense clayey fine SAND to a depth of about 52 feet then medium hard LIMESTONE continued to the completion depth of 60 feet.

In Boring LB-2, the upper fine SAND to shelly fine SAND extended to a depth of about 27 feet. The LIMESTONE formation was present below this depth and extended to the completion depth of 70 feet. The upper few feet of the limestone in this boring was highly weathered and very weak, as indicated by SPT N-values of less than 5 blow per foot. The LIMESTONE was noted to become stronger with depth. The SPT N-values in the limestone below generally ranged from 11 blows per foot to 34 blows per foot (bpf) and averaged in the mid to high 20s.

We estimate that the land surface was approximately at an elevation of 2 feet (LB-2) and 5 feet LB-1). Consequently, the upper portion of the limestone was found to vary from around elevation -25 feet (LB-2) to elevation -45 feet (LB-1).

Groundwater was not recorded in the landside borings. Nevertheless, groundwater along the beach typically lies within an unconfined aquifer system, is tidally influenced, and is recharged by rainfall percolating through the pervious overburden soils. Because the groundwater is strongly influenced by the tides, it is expected that groundwater may vary from around elevation -1 feet to elevation + 4 feet.

3.5.2 Waterside Borings

The waterside SPT borings encountered the mudline at depths varying from about 10 feet to 13 feet below the water surface, assumed to be near elevation 0 feet to 2 feet at the time of drilling. Below the mud line, Boring WB-1 encountered about 2 feet of very loose soil follow by about 20 feet of highly weathered and very weak LIMESTONE. Beginning at about elevation -30 feet, the LIMESTONE found to be firm to medium hard in consistency with SPT N-values ranging from 8 bpf to 28 bpf and averaging around 15 bpf to 20 bpf to the completion depth of 45 feet below the mudline (approximate elevation -55 feet).

Boring WB-2 encountered about 10 feet of loose to dense fine SANDS below the mudline followed by about 20 feet of highly weathered and relatively weak LIMESTONE that was present to around elevation -45 feet. The LIMESTONE

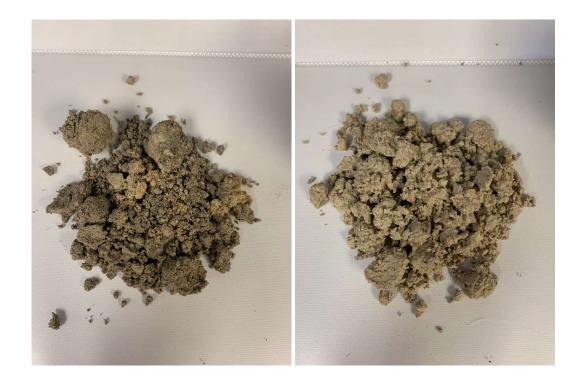


became stronger with depth to the completion depth of about 71 feet below the mudline or near elevation – 80 feet. SPT N-values in the weak zone ranged from less than 1 (weight of rod) to 9 bpf. Below this depth, the N-values varied from 5 bpf to 44 bpf and averaged around 20 bpf.

The soils in Boring WB-3 included about 15 feet of loose to medium dense fine SAND with shell above weak to medium hard LIMESTONE. The highly weathered and weak LIMESTONE extended to around elevation -40 feet or about 30 feet below the mudline. The SPT N-values recorded in the stronger LIMESTONE ranged from 14 bpf to 33 bpf and extended to around 60 feet below the mudline or near elevation -70 feet.

Boring WB-4 encountered about 10 feet of medium dense to very loose fine SAND with some shell underlain by about 15 feet of highly weathered and weak LIMESTONE to around elevation -30 feet. Stronger LIMESTONE extended to the termination depth of about 60 feet below the mudline or near elevation -75 feet. The SPT N-values ranged from 8 bpf to 27 bpf except at 60 feet where the N-value was 60 blows per foot.

Limestone in this area of Florida is generally friable, oolitic and granular. Standard Penetration N-values typically ranged from less than 10 bpf to 60 bpf and averaged about 20 bpf to 30 bpf, which is considered medium hard. Below are photographs of the limestone as removed from the sampler.





4.0 GEOTECHNICAL ASSESSMENT

The following assessment is based on our understanding of the proposed construction, the provided scour/erosion and loading conditions, site observations, our evaluation and interpretation of the field data obtained during this exploration, our experience with similar subsurface conditions, and generally accepted geotechnical engineering principles and practices.

The subsurface conditions identified during these studies are compatible with the use of prestressed concrete piling for support of the replacement structure. NOVA evaluated several pile sizes and lengths before Osborn Engineering concluded that 18-inch square prestressed concrete pile was the appropriate pile section. In consideration of the varying estimated scour/erosion depths along the length of the pier (elevation -10 feet to elevation -20 feet), provided loading information and subsurface conditions that include a weak and highly weathered limestone surface extending to around elevation -30 feet to elevation -40 feet, our analyses indicate that minimum 18-inch square prestressed concrete piling lengths of 70 feet (eastern third of the pier) to 100 feet (western third of the pier) will be required to meet client deflection criteria. Minimum pile tip elevations will need to achieve elevation -50 feet (eastern third of the pier) to elevation -80 feet (western third of the pier). This pile length and minimum tip elevation ensures that at least 40 feet of piling is installed into dense sands and/or competent limestone below the estimated scour/erosion depths and highly weathered upper limestone section.

Subsurface conditions in unexplored locations may vary from those encountered at specific boring locations. If such variations are noted during construction, or if project development plans are changed, we request the opportunity to review the changes and amend our recommendations, if necessary.

The following sections present our recommendations for pile capacity and installation.



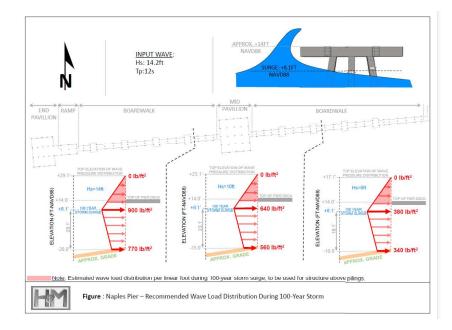
5.0 RECOMMENDATIONS

5.1 MODELING CONDITIONS

The following conditions were provided by Humiston & Moore Engineers and Osborn Engineering for use in our analyses.

- The top of pier elevation is 14 feet, so the top of pile was estimated at elevation 12 feet.
- The estimated sea floor scour/erosion depths provided by Humiston & Moore Engineers ranged from elevation -20 feet along the western third of the pier, elevation -15 feet within the middle third of the pier and at elevation -10 feet along the eastern third including the beach.
- Osborn Engineering indicated that the maximum top of pile lateral deflection cannot exceed 10 inches and the lateral load resistance analyses were based on this requirement.
- Maximum axial compression and tension loads were provided as 83.5 kips and -33.3 kips, respectively.
- Because of the granular nature of the limestone formation, the limestone was conservatively modeled as sand.

Included below is an illustration of wave surge and estimated load distribution on the pier with the affected scour/erosion zones.





5.2 PILE CAPACITIES

5.2.1 Lateral Deflections

The analysis of laterally loaded piles was conducted using the computer program LPILE by Ensoft. Top of pile deflections were limited to 10 inches to develop the pile and soil response. Included in the report Appendices is the output from LPILE for Boring LB-2 and Boring WB- 1. Listed below are estimated mudline deflections based on our analyses.

Estimated Scour Elevation (ft)	Maximum Deflection at Mudline (in)	Minimum Tip elevation (ft)
-10	2.5	-50
-15	2.2	-65
-20	1.7	-80

5.2.2 Compression and Tension Capacity

The maximum estimated pile structural capacities of an 18-inch prestressed concrete pile meeting FDOT specifications include:

- Nominal Axial Capacity (Pn): 892.4 kips
 - Estimated axial load capacity of the pile based on concrete and steel properties.
- Unfactored Axial Load Capacity (N): 333.8 kips
 - Unfactored axial load capacity of the pile.
- Axial Capacity in Tension (Nt): -541.1 kips
 - Axial load capacity in tension, considering the steel strand properties.
- Nominal Moment Capacity (Mn): 3603.6 in-kip
 - Estimated moment capacity of the pile.

NOVA also calculated the ultimate compression and tension capacity of a landside pile installed with the tip elevation near elevation -50 feet and waterside pile installed with the tip elevation near elevation -80 feet. Both cases also accounted for the soil removed (scour) during a storm event.

Boring ID	Tip elevation (ft))	Total Axial Capacity (kips)	Tension Capacity (kips)
LB-1	-50	300	160
WB-1	-80	650	190



5.3 PILE INSTALLATION MONITORING

Installation of pile foundations should be in strict accordance with the current applicable FDOT Standard Specifications for Road and Bridge Construction. We note that hard lenses or layers in limestone may require pre-drilling pilot holes to achieve penetration to the minimum pile tip elevations, expected to be between elevation -50 feet (70 foot pile length) along the eastern third of the pier and elevation -80 feet (100 foot pile length) along the western third of the pier. Pile lengths within the middle section of the pier can vary between these lengths and will depend upon the depth to competent limestone.

Several methods are available to confirm the design capacities of driven piles during construction, including static load testing and dynamic testing. Either type of load test can be utilized with the confirmation of lateral deflection versus loading behavior the most critical test. Because of the required minimum penetration depth into limestone for pile fixity when subjected to lateral loading, the available compression capacity and tension resistance far exceeds the design loads.

It will also be important to test a sufficient number of piles to assist in establishing the required pile driving resistance, or the need for predrilling to reach the required pile depth. For compressive capacity evaluation, a Pile Driving Analyzer (PDA) may be employed on >5% of the piles, with a minimum of ten (10) PDA tests. Using only dynamic pile load testing, a resistance factor (ϕ) of 0.65 is recommended to determine driving resistance. It should also be recognized that even though the PDA tests can provide driving criteria based on the driving system, pile and soil types, the pile tip elevations will be controlled by the required lateral resistance and fixity in the limestone formation. We recommend that at least one lateral load test be conducted on a sacrificial pile at or near the waterline.

During production pile driving, any sudden decrease in driving resistance should be investigated for possible breakage of the pile. If sudden decrease in driving resistance cannot be correlated to boring data or some incident in the driving, and if the pile cannot be inspected, such decrease in driving resistance may be cause for rejection of the pile.

Any pile which is raised or otherwise disdurbed during driving of adjacent piles, should be redriven to the original tip elevation. Piles should be cut off at top elevation directed by the Design Engineer. Piles should be replaced or repaired piles if damaged when cut off.



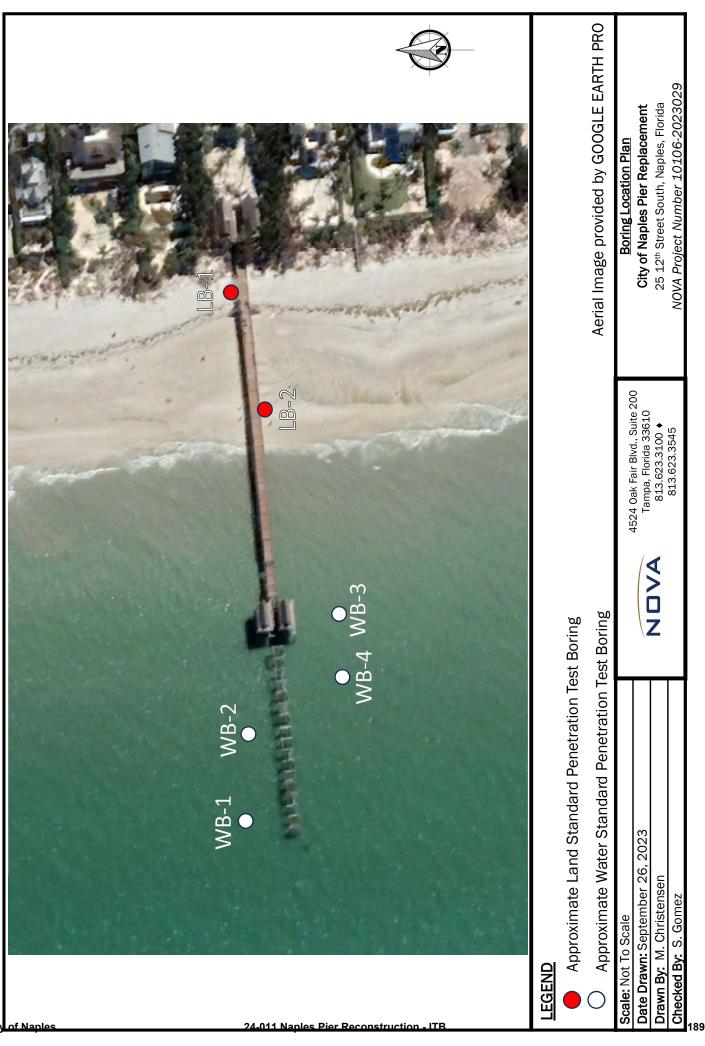
A qualified inspector should observe the installation of the piles. The purpose of the inspector's observations is to determine if production installations are being performed in accordance with acceptable methods. Continuous installation records should be maintained for all piles.

The field duties of the inspector should include the following:

- Being knowledgeable of the subsurface conditions at the site and the projectspecific Pile Installation Criteria.
- Being aware of aspects of the installation including type of equipment and pile installation tolerances.
- Keeping an accurate record of pile installation procedures.
- Documenting that the piles are installed to the proper depth/elevation indicative of the intended bearing stratum.
- Recording the number of hammer blows for each foot of driving (during all installation procedures).
- Generally confirming that the pile installation equipment is operating as anticipated.
- Informing the Geotechnical Engineer of any unusual subsurface conditions or driving conditions.
- Notifying the contractor and structural engineer when unanticipated difficulties or conditions are encountered.
- Confirming from visual appearance that the piles are not damaged during installation and observing the piles prior to installation for defective workmanship. A third party inspector should review all installation records prior to initiating the following phase of construction.



APPENDIX A - BORING LOCATION PLAN



APPENDIX B – SUBSURFACE DATA

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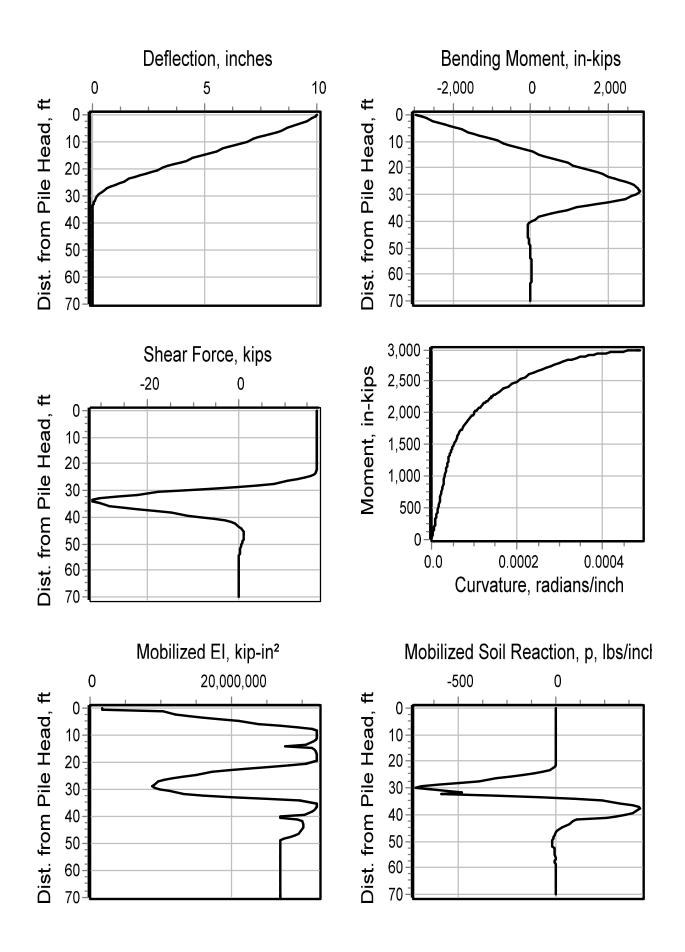
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			PROJECT: <u>Naples Pier</u> CLIENT: <u>Turrell, Hall & Associates, I</u>			_ PR	OJEC	CT NO.: 10106-2023029		
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APPENDIX C – BORING LB-1 LPILE OUTPUT



LPile for Windows, Version 2022-12.010

Analysis of Individual Piles and Drilled Shafts Subjected to Lateral Loading Using the p-y Method © 1985-2022 by Ensoft, Inc. All Rights Reserved

This copy of LPile is being used by:

sgomez Tampa

Serial Number of Security Device: 253582354

This copy of LPile is licensed for exclusive use by:

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Use of this software by employees of NOVA other than those of the office site in LPILE Sm Global, Global License is a violation of the software license agreement.

Files Used for Analysis

Path to file locations: \Offices\TPA\Clients\T\Turrell, Hall & Associates, Inc\City of Naples Pier\10106-2023029 - GEO\Calculations\

Name of input data file: WB-1.lp12d

Name of output report file: WB-1.lp12o

Name of plot output file: WB-1.lp12p

Name of runtime message file: WB-1.lp12r

Date and Time of Analysis

Date: October 11, 2023

Time: 12:02:28

Problem Title

Project Name: City of Naples Pier Job Number: 10106-2023029 Client: Turrel, Hall & Associates Engineer: SG Description: Pier Design

Program Options and Settings

Computational Options: - Conventional Analysis Engineering Units Used for Data Input and Computations: - US Customary System Units (pounds, feet, inches)

Analysis Control Options:

- Maximum number of iterations allowed = 500 1.0000E-05 in
- Deflection tolerance for convergence =
- Maximum allowable deflection 300.0000 in =

100

=

- Number of pile increments

Loading Type and Number of Cycles of Loading:

- Cyclic loading specified
- Number of cycles of loading 5000 cycles
- Use of p-y modification factors for p-y curves not selected
- Analysis uses layering correction (Method of Georgiadis)
- No distributed lateral loads are entered
- Loading by lateral soil movements acting on pile not selected
- Input of shear resistance at the pile tip not selected
- Input of moment resistance at the pile tip not selected
- Computation of pile-head foundation stiffness matrix not selected
- Push-over analysis of pile not selected
- Buckling analysis of pile not selected

Output Options:

- Output files use decimal points to denote decimal symbols.
- Values of pile-head deflection, bending moment, shear force, and soil reaction are printed for full length of pile.
- Printing Increment (nodal spacing of output points) = 1
- No p-y curves to be computed and reported for user-specified depths
- Print using wide report formats

Pile Structural Properties and Geometry

Number of pile sections defined	= 1
Total length of pile =	70.000 ft
Depth of ground surface below top of pile	= 22.0000 ft

Pile diameters used for p-y curve computations are defined using 2 points.

p-y curves are computed using pile diameter values interpolated with depth over the length of the pile. A summary of values of pile diameter vs. depth follows.

	Depth Below	Pile
Point	Pile Head	Diameter
No.	feet	inches
1	0.000	18.0000
2	70.000	18.0000

Input Structural Properties for Pile Sections:

Pile Section No. 1:

Section 1 is a square prestressed	concrete pile
Length of section	= 70.000000 ft
Pile Width	= 18.000000 in
Corner Chamfer	= 0.750000 in

Ground Slope and Pile Batter Angles

Ground Slope Angle	=	= 0.000 degrees 0.000 radians
Pile Batter Angle	=	= 0.000 degrees 0.000 radians

The soil profile is modelled using 6 layers

Layer 1 is sand, p-y criteria by API RP-2A, 1987

Layer 2 is sand, p-y criteria by API RP-2A, 1987

Distance from top of pile to top of layer	= 32.000000 ft
Distance from top of pile to bottom of lay	yer = 42.000000 ft
Effective unit weight at top of layer	= 57.600000 pcf
Effective unit weight at bottom of layer	= 57.600000 pcf
Friction angle at top of layer	= 40.00000 deg.
Friction angle at bottom of layer	= 40.000000 deg.
Subgrade k at top of layer	= 120.00000 pci
Subgrade k at bottom of layer	= 120.00000 pci

Layer 3 is sand, p-y criteria by API RP-2A, 1987

Distance from top of pile to top of layer	= 42.000000 ft
Distance from top of pile to bottom of lay	yer = 47.000000 ft
Effective unit weight at top of layer	= 47.600000 pcf
Effective unit weight at bottom of layer	= 47.600000 pcf
Friction angle at top of layer	= 35.000000 deg.
Friction angle at bottom of layer	= 35.000000 deg.
Subgrade k at top of layer	= 60.00000 pci
Subgrade k at bottom of layer	= 60.000000 pci

Layer 4 is sand, p-y criteria by API RP-2A, 1987

Distance from top of pile to top of layer	= 47.000000 ft
Distance from top of pile to bottom of lay	yer = 52.000000 ft
Effective unit weight at top of layer	= 52.600000 pcf
Effective unit weight at bottom of layer	= 52.600000 pcf
Friction angle at top of layer	= 38.000000 deg.
Friction angle at bottom of layer	= 38.000000 deg.
Subgrade k at top of layer	= 60.00000 pci
Subgrade k at bottom of layer	= 60.000000 pci

Layer 5 is sand, p-y criteria by API RP-2A, 1987

Distance from top of pile to top of layer	= 52.000000 ft
Distance from top of pile to bottom of la	yer = 57.000000 ft
Effective unit weight at top of layer	= 47.600000 pcf
Effective unit weight at bottom of layer	= 47.600000 pcf
Friction angle at top of layer	= 30.000000 deg.
Friction angle at bottom of layer	= 30.000000 deg.
Subgrade k at top of layer	= 30.00000 pci
Subgrade k at bottom of layer	= 30.000000 pci

Layer 6 is sand, p-y criteria by API RP-2A, 1987

Distance from top of pile to top of layer	= 57.000000 ft
Distance from top of pile to bottom of la	yer $= 122.000000$ ft
Effective unit weight at top of layer	= 62.60000 pcf
Effective unit weight at bottom of layer	= 62.60000 pcf
Friction angle at top of layer	= 40.00000 deg.
Friction angle at bottom of layer	= 40.000000 deg.
Subgrade k at top of layer	= 120.00000 pci
Subgrade k at bottom of layer	= 120.000000 pci

Summary of Input Soil Properties							
Layer Num.	Soil Type Name (p-y Curve Typ	Depth	Effective Unit Wt pcf	0			
1	API	22.0000	47.6000	35.0000	60.0000		
	Sand	32.0000	47.6000	35.0000	60.0000		
2	API	32.0000	57.6000	40.0000	120.0000		
	Sand	42.0000	57.6000	40.0000	120.0000		
3	API	42.0000	47.6000	35.0000	60.0000		
	Sand	47.0000	47.6000	35.0000	60.0000		
4	API	47.0000	52.6000	38.0000	60.0000		
	Sand	52.0000	52.6000	38.0000	60.0000		
5	API	52.0000	47.6000	30.0000	30.0000		
	Sand	57.0000	47.6000	30.0000	30.0000		
6	API	57.0000	62.6000	40.0000	120.0000		
	Sand	122.0000	62.6000	40.0000	120.0000		

Cyclic Loading Type

Cyclic loading criteria were used for computation of p-y curves for all analyses.

Number of cycles of loading = 5000

Pile-head Loading and Pile-head Fixity Conditions

Number of loads specified = 1

 Load
 Load
 Condition
 Condition
 Axial Thrust
 Compute Top y
 Run Analysis

 No.
 Type
 1
 2
 Force, lbs
 vs. Pile Length

 1
 5
 y = 10.000000 in
 S = 0.0000 in/in
 30000.
 N.A.
 Yes

V = shear force applied normal to pile axis

M = bending moment applied to pile head

y = lateral deflection normal to pile axis

S = pile slope relative to original pile batter angle

R = rotational stiffness applied to pile head

Values of top y vs. pile lengths can be computed only for load types with

specified shear loading (Load Types 1, 2, and 3).

Thrust force is assumed to be acting axially for all pile batter angles.

Computations of Nominal Moment Capacity and Nonlinear Bending Stiffness

Axial thrust force values were determined from pile-head loading conditions

Number of Pile Sections Analyzed = 1

Pile Section No. 1:

Dimensions of Square Prestressed Pile Section:

Length of Section	= 70.0000 ft
Pile Width	= 18.000 in
Corner Chamfer	= 0.750 in

Prestressing Strand Details:

City of Naples

Strand Type	= PCI 270
Yield Stress, fpu	= 270. ksi
Elasticity Modulus, Es	= 28000. ksi
Stress-strain curve defined using PCI 2	70 7-wire Lo-lax equation
If eps > 0.0086 fpu (ksi) = $270 - 0.04/(6)$	eps-0.007)
Number of Reinforcing Strands	= 12
Cross-sectional Area of Single Strand	= 0.167 sq. in.
Concrete Cover Thickness Over Strand	s = 3.000 in

Prestressing Strand Geometry:

Strand No.	Diameter in	Area sq. in	X in	Y in
1	0.500	0.167	-5.750	-5.750
2	0.500	0.167	-1.917	-5.750
3	0.500	0.167	1.917	-5.750
4	0.500	0.167	5.750	-5.750
5	0.500	0.167	5.750	0.000
6	0.500	0.167	5.750	3.833
7	0.500	0.167	5.750	5.750
8	0.500	0.167	1.917	5.750
9	0.500	0.167	-1.917	5.750
10	0.500	0.167	-5.750	5.750
11	0.500	0.167	-5.750	0.000
12	0.500	0.167	-5.750	-3.833

Computation of Loss of Prestress:

Initial Prestressing Force	=	378.000 kips
Fraction of Loss of Prestress	=	0.100
Effective Prestressing Force After Loss	es	= 340.200 kips
Area of Concrete, Ac	=	320.871 sq.in
Area of Steel, As	=	2.004 sq.in
Stress in Concrete After Losses, f_pc		= 1.060 ksi
Stress in Steel After Losses	=	-169.760 ksi
Compressive Strain in Concrete After L	losses	= 0.0002941
Tensile Strain in Steel After Losses		= -0.0060629
Axial Tension Load for Cracking of Co	ncrete	= -413.727 kips

Estimated Structural Capacities Computed Using PCI Equations:

Nom. Axial Cap., $Pn = (0.85 \text{ fc} - 0.60 \text{ f pc}) \text{ Ag}$	=	8	392.380 kips
Unfac. Axial Load Cap. N = $(0.33 \text{ fc} - 0.27 \text{ f pc}) \text{ A}$	g :	=	333.767 kips
Axial Capacity in Tension, Nt = As fpu =	-	541	1.080 kips
Nom. Moment Capacity, Mn = 0.37 D As fpu	-	=	3603.593 in-kip

Note: The estimate of nominal moment capacity is based on equations that assume compressive strength of concrete is 6,000 psi (41.4 MPa), the value of prestress after losses is 700 psi (4.83 MPa), and axial thrust force is zero. When input values for these factors are different, the estimated value of nominal moment capacity will differ from the capacity computed by LPile and should be considered only as an approximate check.

Concrete Properties:

Compressive Strength of Concrete	= 4000. psi
Modulus of Elasticity of Concrete	= 3604997. psi
Modulus of Rupture of Prestressed Concrete	= -252.98221 psi
Compression Strain at Peak Stress	= 0.001886
Tensile Strain at Fracture of Concrete	= -0.0000606
Maximum Coarse Aggregate Size	= 0.750000 in

Number of Axial Thrust Force Values Determined from Pile-head Loadings = 1

Number Axial Thrust Force kips _____ 30.000

```
1
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Definitions of Run Messages and Notes:

- $\mathbf{C}=\mathbf{concrete}$ in section has cracked in tension.
- $\mathbf{Y}=\mathbf{stress}$ in reinforcing steel has reached yield stress.
- T = ACI 318 criteria for tension-controlled section met, tensile strain in reinforcement exceeds 0.005 while simultaneously compressive strain in concrete more than 0.003. See ACI 318-14, Section 21.2.3.
- Z = depth of tensile zone in concrete section is less than 10 percent of section depth.

Bending Stiffness (EI) = Computed Bending Moment / Curvature. Position of neutral axis is measured from edge of compression side of pile. Compressive stresses and strains are positive in sign. Tensile stresses and strains are negative in sign.

Axial Thrust Force = 30.000 kips

Bending Bending Depth to Max Comp Max Tens Max Conc Max Steel Run Curvature Moment Stiffness N Axis Strain Strain Stress Stress Msg rad/in. in-kip kip-in2 in in/in in/in ksi ksi
0.00000125 33.4876630 26790130. 237.9663219 0.0005916 0.0002750 1.1616959 -164.849810
0.00000250 73.9639266 29585571. 123.4977119 0.0006028 0.0002637 1.2014754 -165.063592
0.00000375 114.4366530 30516441. 85.3481688 0.0006142 0.0002526 1.2410621 -165.276662
0.00000500 154.9040280 30980806. 66.2783930 0.0006255 0.0002414 1.2804543 -165.489020
0.00000625 195.3642376 31258278. 54.8405246 0.0006369 0.0002303 1.3196499 -165.700667
0.00000750 235.8154667 31442062. 47.2186107 0.0006482 0.0002191 1.3586471 -165.911601
0.00000875 276.2559005 31572103. 41.7757363 0.0006596 0.0002080 1.3974441 -166.121822
0.00001000 316.6837230 31668372. 37.6932375 0.0006710 0.0001969 1.4360389 -166.331332
0.00001125 357.0971161 31741966. 34.5287534 0.0006826 0.0001859 1.4744297 -166.540128
0.00001250 397.4942636 31799541. 31.9947838 0.0006940 0.0001749 1.5126145 -166.748212
0.00001375 437.8733394 31845334. 29.9233563 0.0007055 0.0001639 1.5505916 -166.955582
0.00001500 478.2325306 31882169. 28.1988361 0.0007171 0.0001530 1.5883590 -167.162239
0.00001625 518.5700118 31912001. 26.7411685 0.0007286 0.0001420 1.6259148 -167.368181
0.00001750 558.8839592 31936226. 25.4931715 0.0007402 0.0001311 1.6632571 -167.573409
0.00001875 599.1725471 31955869. 24.4129118 0.0007518 0.0001202 1.7003841 -167.777923
0.00002000 639.4339479 31971697. 23.4689395 0.0007635 0.0001094 1.7372938 -167.981721
$0.00002125 \ 679.6663320 \ \ 31984298. \ \ 22.6372048 \ \ 0.0007751 \ \ 0.00009854 \ \ 1.7739844 \ \ -168.184803 \ \ -168.18$
0.00002250 719.8678675 31994127. 21.8990021 0.0007868 0.00008773 1.8104540 -168.387169
0.00002375 760.0367204 32001546. 21.2395640 0.0007985 0.00007694 1.8467006 -168.588817
0.00002500 800.1710540 32006842. 20.6470768 0.0008103 0.00006618 1.8827223 -168.789749
0.00002625 840.2690291 32010249. 20.1119768 0.0008220 0.00005544 1.9185173 -168.989962
0.00002750 880.3288039 32011957. 19.6264394 0.0008338 0.00004473 1.9540837 -169.189457
0.00002875 920.3485334 32012123. 19.1840007 0.0008456 0.00003404 1.9894194 -169.388232
0.00003000 960.3263698 32010879. 18.7792742 0.0008575 0.00002338 2.0245227 -169.586287
0.00003125 1000. 32008335. 18.4077353 0.0008693 0.00001274 2.0593915 -169.783621
0.00003250 1040. 32004583. 18.0655556 0.0008812 0.0000213 2.0940241 -169.980233
0.00003375 1080. 31999654. 17.7494688 0.0008931 -0.0000846 2.1284178 -170.176127
0.00003500 1120. 31993194. 17.4566372 0.0009051 -0.00001902 2.1625665 -170.371346
0.00003625 1159. 31984802. 17.1846033 0.0009170 -0.00002956 2.1964631 -170.565942
0.00003750 1199. 31974213. 16.9312432 0.0009290 -0.00004008 2.2301010 -170.759963
0.00003875 1238. 31961265. 16.6947129 0.0009410 -0.00005058 2.2634747 -170.953449
0.00004000 1278. 31945878. 16.4734040 0.0009530 -0.00006106 2.2965793 -171.146436
0.00004125 1303. 31599225. 16.2323869 0.0009637 -0.00007291 2.3256184 -171.378360 C
0.00004250 1334. 31377461. 16.0161981 0.0009748 -0.00008431 2.3556403 -171.597370 C
0.00004375 1362. 31132745. 15.8087775 0.0009857 -0.00009587 2.3849686 -171.820844 C
0.00004500 1382. 30719806. 15.5925809 0.0009958 -0.000108 2.4115876 -172.070404 C
0.00004625 1408. 30442557. 15.4005940 0.0010064 -0.000120 2.4395295 -172.303355 C
0.00004750 1432. 30154422. 15.2159047 0.0010169 -0.000132 2.4668646 -172.540203 C
0.00004875 1449. 29730588. 15.0219969 0.0010264 -0.000145 2.4915847 -172.803033 C
0.00005125 1493. 29124024. 14.6843192 0.0010467 -0.000170 2.5432855 -173.296824 C
0.00005375 1532. 28505346. 14.3690356 0.0010664 -0.000195 2.5928679 -173.804404 C
0.00005625 1569. 27884531. 14.0737294 0.0010857 -0.000221 2.6404708 -174.324908 C
0.00005875 1603. 27277754. 13.7977358 0.0011047 -0.000247 2.6864213 -174.855186 C 0.00006125 1640. 26769272. 13.5525393 0.0011242 -0.000272 2.7327938 -175.370997 C
0.00006375 1669. 26177891. 13.3067066 0.0011424 -0.000299 2.7753621 -175.922911 C 0.00006625 1701. 25677029. 13.0877131 0.0011612 -0.000325 2.8184689 -176.459179 C
0.00007125 1744. 24477308. 12.6374326 0.0011945 -0.000382 2.8931001 -177.650323 C 0.00007375 1771. 24011378. 12.4497045 0.0012123 -0.000409 2.9318633 -178.215216 C
0.00007625 1797. 23561542. 12.2719928 0.0012298 -0.000437 2.9695351 -178.785410 C 0.00007875 1821. 23127439. 12.1032849 0.0012472 -0.000464 3.0061630 -179.360562 C
0.00008125 1845. 22708724. 11.9429096 0.0012645 -0.000492 3.0417947 -179.940291 C

0.00008375	1868.	22305022.	11.7904970	0.0012816	-0.000520	3.0764768	-180.524205 C
0.00008625	1890.	21913749.	11.6444612	0.0012984	-0.000548	3.1101444	-181.113463 C
0.00008875	1911.	21536509.	11.5056002	0.0013152	-0.000576	3.1429305	-181.706445 C
0.00009125	1932.	21173025.	11.3729047	0.0013319	-0.000605	3.1748834	-182.302649 C
0.00009375	1952.	20823015.	11.2458722	0.0013484	-0.000633	3.2060518	-182.901532 C
0.00009625	1971.	20482760.	11.1242425	0.0013648	-0.000662	3.2362801	-183.505643 C
0.00009875	1990.	20155010.	11.0077486	0.0013811	-0.000690	3.2657761	-184.112040 C
0.0001013	2009.	19839353.	10.8960617	0.0013973	-0.000719	3.2945774	-184.720257 C
0.0001038	2026.	19531975.	10.7883074	0.0014134	-0.000748	3.3224925	-185.333537 C
0.0001063	2044.	19236480.	10.6855288	0.0014294	-0.000777	3.3498019	-185.947518 C
0.0001088	2061.	18949342.	10.5859477	0.0014453	-0.000806	3.3763227	-186.565360 C
0.0001113	2077.	18672132.	10.4905599	0.0014612	-0.000835	3.4022046	
0.0001138	2093.	18403288.	10.3984068	0.0014769	-0.000865	3.4273864	
0.0001163	2109.	18143094.	10.3097704	0.0014926	-0.000894	3.4519278	-188.430585 C
0.0001188	2125.	17890574.	10.2240732	0.0015082	-0.000923		-189.056849 C
0.0001213	2140.	17646302.	10.1416566	0.0015238	-0.000953	3.4990861	-189.684173 C
0.0001238	2154.	17408431.	10.0616277	0.0015392	-0.000982		-190.314673 C
0.0001263	2169.	17179116.	9.9850224	0.0015547	-0.001012		-190.944376 C
0.0001288	2183.	16954459.	9.9099904	0.0015700	-0.001042		-191.579113 C
0.0001313	2197.	16737791.	9.8381546	0.0015854	-0.001071		-192.212636 C
0.0001338	2210.	16526561.	9.7682808	0.0016006	-0.001101		-192.848913 C
0.0001363	2224.	16321148.	9.7005870	0.0016158	-0.001131	3.6259373	-193.486680 C
0.0001388	2237.	16122604.	9.6356375	0.0016310	-0.001161		-194.123240 C
0.0001413	2250.	15927742.	9.5717846	0.0016461	-0.001190		-194.764639 C
0.0001438	2262.	15738885.	9.5103001	0.0016612	-0.001220		-195.405433 C
0.0001463	2275.	15555981.	9.4512059	0.0016763	-0.001250		-196.045030 C
0.0001488	2287.	15376073.	9.3928571	0.0016913	-0.001280		-196.689881 C
0.0001588	2334.	14704251.	9.1778147	0.0017511	-0.001401	3.7787943	-199.269396 C
0.0001688	2379.	14096095.	8.9863495	0.0018105	-0.001521		-201.858068 C
0.0001788	2421.	13542668.	8.8152367	0.0018698	-0.001642	3.8800565	-204.452250 C
0.0001888	2461.	13036527.	8.6618235	0.0019290	-0.001763		-207.048726 C
0.0001988	2499.	12571616.	8.5241403	0.0019883	-0.001883		
0.0002088	2535.	12141973.	8.3997074	0.0020475	-0.002004		-212.237732 C
0.0002188	2569.	11743397.	8.2856660	0.0021066	-0.002125		-214.828497 C
0.0002288	2602.	11373335.	8.1869768	0.0021669	-0.002245		-217.404150 C
0.0002388	2632.	11025795.	8.0953957	0.0022269	-0.002365	3.9996375	-219.977564 C -222.522997 C
0.0002488	2662.	10699877.	8.0151247	0.0022879	-0.002484	3.9999778	
0.0002588	2689. 2715.	10391734.	7.9420276	0.0023491	-0.002603		-225.061282 C
0.0002688 0.0002788	2713. 2740.	10101594. 9827886.	7.8775611 7.8203782	0.0024112 0.0024740	-0.002720 -0.002838		-227.575127 C -230.067855 C
0.0002788	2740.	9827880. 9568591.	7.7680411	0.0024740	-0.002838		-230.007833 C -232.553299 C
0.0002988	2785.	9323498.	7.7218435	0.0025571	-0.002934		-235.016300 C
0.0003088	2807.	9091465.	7.6810779	0.0026656	-0.003186		-237.457837 C
0.0003188	2828.	8871402.	7.6448767	0.0027309	-0.003301		-239.881144 C
0.0003288	2848.	8662021.	7.6115852	0.0027964	-0.003415		-242.297825 C
0.0003288	2867.	8462957.	7.5823343	0.0028626	-0.003529		-244.694473 C
0.0003488	2885.	8272105.	7.5559312	0.0029292	-0.003642		-246.040095 C
0.0003588	2899.	8081599.	7.5282729	0.0029292	-0.003757		-247.196527 C
0.0003688	2911.	7893428.	7.5002560	0.0030598	-0.003872		-248.254574 C
0.0003788	2921.	7711999.	7.4739259	0.0031249	-0.003987		-249.217943 C
0.0003888	2930.	7537498.	7.4480849	0.0031895	-0.004102		-250.102906 C
0.0003988	2939.	7369691.	7.4239914	0.0032544	-0.004217		-250.913913 C
0.0004088	2947.	7208593.	7.4014042	0.0033194	-0.004332		-251.660116 C
0.0004188	2954.	7053594.	7.3806718	0.0033848	-0.004447		-252.347687 C
0.0004288	2960.	6904704.	7.3613805	0.0034503	-0.004561		-252.984477 C
0.0004388	2967.	6761349.	7.3436107	0.0035161	-0.004675		-253.574767 C
0.0004488	2972.	6623337.	7.3268848	0.0035820	-0.004790		-254.124757 C
0.0004588	2977.	6489998.	7.3111232	0.0036481	-0.004904		-254.638407 C
0.0004688	2982.	6360950.	7.2959857	0.0037141	-0.005018		-255.120118 C
0.0004788	2985.	6235787.	7.2804267	0.0037796	-0.005132		-255.575099 C
0.0004888	2989.	6114827.	7.2654883	0.0038451	-0.005246		-256.003107 C

Summary of Results for Nominal Moment Capacity for Section 1

Moment values interpolated at maximum compressive strain = 0.003 or maximum developed moment if pile fails at smaller strains.

Load	Axial Thrust		. 1	Max. Comp.	Max. Tens.
No.	kips	in-kip	Strain	Strain	
1	30.000	2900.176	0.00300	000 -0.00376	582

Note that the values of moment capacity in the table above are not factored by a strength reduction factor (phi-factor).

In ACI 318, the value of the strength reduction factor depends on whether the transverse reinforcing steel bars are tied hoops (0.65) or spirals (0.75).

The above values should be multiplied by the appropriate strength reduction factor to compute ultimate moment capacity according to ACI 318, or the value required by the design standard being followed.

The following table presents factored moment capacities and corresponding bending stiffnesses computed for common resistance factor values used for reinforced concrete sections.

Axial Load No.		Ax. Thrust	Moment	l Ult. (Fac) Cap Ax. Thru ps in-kips	st Mon	nent Cap at Ult Mom
1	0.65	30.000000	2900.	19.500000	1885.	22001661.
1	0.75	30.000000	2900.	22.500000	2175.	17078690.
1	0.90	30.000000	2900.	27.000000	2610.	11277202.

Layering Correction Equivalent Depths of Soil & Rock Layers

Top of Equivalent

	iopoi L	141, 41011					
	Layer T	op Depth	Same La	ayer Laye	er is	F0	F1
Layer	Below	Below	Туре	As Roc	ck or	Integral	Integral
No.	Pile Head	Grnd Su	f Lay	er is B	elow	for Layer	for Layer
	ft ft	Abov	e Roc	k Layer	lbs	lbs	
							-
1	22.0000	0.00	N.A.	No	0.0	0 535	18.
2	32.0000	8.6644	Yes	No	53	518. 45	6272.
3	42.0000	21.3253	Yes	No	50	9790. 4	15947.
4	47.0000	24.1618	Yes	No	92	5738. 6	77502.
5	52.0000	41.5065	Yes	No	160	3239. 3	26077.
6	57.0000	29.3722	Yes	No	192	.9316.	N.A.

Notes: The F0 integral of Layer n+1 equals the sum of the F0 and F1 integrals for Layer n. Layering correction equivalent depths are computed only for soil types with both shallow-depth and deep-depth expressions for peak lateral load transfer. These soil types are soft and stiff clays, non-liquefied sands, and cemented c-phi soil.

Computed Values of Pile Loading and Deflection for Lateral Loading for Load Case Number 1

Pile-head conditions are Displacement and Pile-head Rotation (Loading Type 5)Displacement of pile head= 10.000000 inchesRotation of pile head= $0.000E+00$ radiansAxial load on pile head= 30000.0 lbs							
Depth Deflect. Bending Shear Slope Total Bending Soil Res. Soil Spr. Distrib. X y Moment Force S Stress Stiffness p Es*H Lat. Load feet inches in-lbs lbs radians psi* lb-in^2 lb/inch lb/inch lb/inch							
0.00 10.0000 -2988666.		0.00 1.75E+09	0.00 0.00 0.00				
0.7000 9.9399 -2842551.	171800.01396	0.00 1.75E+09	0.00 0.00 0.00				
1.4000 9.7654 -2693006.	171800.02186	0.00 1.03E+10	0.00 0.00 0.00				
2.1000 9.5726 -2542910.	171800.02384	0.00 1.20E+10	0.00 0.00 0.00				
2.8000 9.3649 -2392366.	171800.02545	0.00 1.39E+10	0.00 0.00 0.00				
3.5000 9.1450 -2241459.	171800.02676	0.00 1.61E+10	0.00 0.00 0.00				
4.2000 8.9153 -2090256.	171800.02782	0.00 1.85E+10	0.00 0.00 0.00				
4.9000 8.6776 -1938813.	171800.02868	0.00 2.11E+10	0.00 0.00 0.00				
5.6000 8.4334 -1787175.	171800.02939	0.00 2.37E+10	0.00 0.00 0.00				
6.3000 8.1839 -1635378.	171800.02996	0.00 2.68E+10	0.00 0.00 0.00				
7.0000 7.9301 -1483452.	171800.03043	0.00 2.92E+10	0.00 0.00 0.00				
7.7000 7.6727 -1331418.	171800.03082	0.00 3.14E+10	0.00 0.00 0.00				
8.4000 7.4123 -1179294.	171800.03115	0.00 3.20E+10	0.00 0.00 0.00				

9.1000	7.1493 -	1027093.	171800.03144	0.00 3.20E+10	0.00	0.00 0	.00
9.8000	6.8840	-874824.	171800.03169	0.00 3.20E+10	0.00	0.00 0.	00
10.5000	6.6169	-722496.	171800.03190	0.00 3.20E+10	0.00	0.00 0	.00
11.2000	6.3481	-570121.	171800.03207	0.00 3.19E+10	0.00	0.00 0	.00
11.9000	6.0780	-417708.	171800.03220	0.00 3.18E+10	0.00	0.00 0	.00
12.6000	5.8071	-265268.	171800.03229	0.00 3.15E+10	0.00	0.00 0	.00
13.3000	5.5355	-112809.	171800.03234	0.00 3.05E+10	0.00	0.00 0	.00
14.0000	5.2637	39657.	171800.03235	0.00 2.75E+10	0.00		00
14.7000	4.9920	192120.	171800.03232	0.00 3.12E+10	0.00		.00
15.4000	4.7207	344571.	171800.03225	0.00 3.17E+10	0.00		.00
16.1000	4.4502	496998.	171800.03214	0.00 3.19E+10	0.00		.00
16.8000	4.1808	649392.	171800.03199	0.00 3.20E+10	0.00		.00
17.5000	3.9128	801743.	171800.03180	0.00 3.20E+10	0.00		.00
18.2000	3.6466	954041.	171800.03157	0.00 3.20E+10	0.00		.00
18.9000	3.3824	1106277.	171800.03130	0.00 3.20E+10	0.00		0.00
19.6000	3.1208	1258439.	171800.03099	0.00 3.20E+10	0.00		0.00
20.3000	2.8619	1410517.	171800.03063	0.00 3.04E+10	0.00		0.00
21.0000	2.6062	1562498.	171800.03020	0.00 2.80E+10	0.00		0.00
21.7000	2.3546	1714360.	171800.02968	0.00 2.54E+10	0.00		0.00
22.4000	2.1076	1866079.	171420.02904	0.00 2.23E+10	-9.021	35.9515	0.00
23.1000	1.8666	2016985.	169660.02826	0.00 1.97E+10	-32.972	148.3781	0.00
23.8000	1.6328	2165347.	165440.02731	0.00 1.72E+10	-67.316	346.3045	0.00
24.5000	1.4079	2308694.	157910.02613	0.00 1.51E+10	-112.052	668.5446	0.00
25.2000	1.1938	2443810.	146180.02471		-167.181	1176.	0.00
25.9000	0.9927	2566739.	129390.02302	0.00 1.18E+10	-232.701	1969.	0.00
26.6000	0.8070	2672787.	106650.02105	0.00 1.06E+10		3212.	0.00
27.3000	0.6391	2756524.	77110.01878	0.00 9.64E+09		5190.	0.00
28.0000	0.4914	2811790.	39880.01627		-491.443	8400.	0.00
28.7000	0.3657	2831721.	-576.998 -0.01362	0.00 8.83E+09 0.00 9.07E+09			0.00
29.4000	0.2626	2808961.	-59670.01097			22006.	0.00
30.1000	0.1814 0.1197	2737002. 2613882.	-118670.00851 -175520.00636	0.00 9.85E+09 0.00 1.12E+10		33197. 44677.	0.00
30.8000 31.5000		2445342.		0.00 1.12E+10 0.00 1.32E+10			$\begin{array}{c} 0.00\\ 0.00\end{array}$
32.2000		22443342.		0.00 1.52E+10 0.00 1.60E+10			0.00
32.9000	0.01999	1998253.		0.00 1.00E+10 0.00 2.00E+10			0.00
33.6000	0.00473	1731671.		0.00 2.49E+10		140243.	0.00
34.3000	-0.00564			0.00 2.96E+10			0.00
35.0000	-0.01252	1194020.		0.00 2.90E+10 0.00 3.20E+10			
35.7000	-0.01232	945083.	-282673.82E-04	0.00 3.20E+10			
36.4000	-0.01894	719334.	-252411.63E-04	0.00 3.20E+10			
37.1000	-0.01952	521120.	-218244.27E-07	0.00 3.19E+10			
37.8000	-0.01895	352686.	-18246. 1.15E-04	0.00 3.17E+10	429.4610		
38.5000	-0.01759	214532.	-14692. 1.90E-04	0.00 3.14E+10			
39.2000	-0.01575	105766.	-11307. 2.34E-04	0.00 3.04E+10			0.00
39.9000	-0.01366	24460.	-8195. 2.52E-04	0.00 2.68E+10		216209.	0.00
	-0.01151	-32031.	-5423. 2.51E-04	0.00 2.68E+10		224777.	0.00
				0.00 2.93E+10			0.00
	-0.00755	-83001.	-1468. 2.15E-04	0.00 2.99E+10		120951.	0.00
42.7000		-91552.	-646.509 1.91E-04	0.00 3.01E+10			0.00
43.4000	-0.00434	-93958.	-0.130 1.65E-04	0.00 3.01E+10		129423.	0.00
44.1000	-0.00307	-91637.	486.0357 1.39E-04	0.00 3.01E+10	48.8386	5 133659.	0.00
44.8000	-0.00201	-85863.	829.7799 1.14E-04	0.00 2.99E+10	33.0052	2 137893.	0.00
45.5000	-0.00115	-77754.	1050. 9.10E-05	0.00 2.97E+10	19.5276	142128.	0.00
46.2000	-4.82E-04	-68262.	1168. 7.02E-05	0.00 2.94E+10	8.4040	146362.	0.00
46.9000	2.55E-05	-58171.	1201. 5.20E-05	0.00 2.89E+10	-0.457	150595.	0.00
47.6000	3.91E-04	-48109.	1169. 3.64E-05	0.00 2.83E+10	-7.213	154829.	0.00
48.3000	6.37E-04	-38552.	1088. 2.34E-05	0.00 2.74E+10	-12.064	159062.	0.00
49.0000	7.84E-04		973.2809 1.28E-05	0.00 2.68E+10			
49.7000	8.52E-04			0.00 2.68E+10			
50.4000	8.61E-04		692.6955 -1.35E-06	0.00 2.68E+10			
51.1000	8.29E-04		545.8099 -5.48E-06	0.00 2.68E+10			
51.8000	7.69E-04		403.5717 -8.17E-06	0.00 2.68E+10			0.00
52.5000	6.92E-04		302.3784 -9.80E-06	0.00 2.68E+10		92232.	0.00
53.2000	6.04E-04		241.9692 -1.06E-05	0.00 2.68E+10		94349.	0.00
53.9000	5.13E-04		3 188.7066 -1.08E-05				0.00
54.6000			143.1234 -1.05E-05	0.00 2.68E+10		98582.	0.00
55.3000	3.37E-04		105.3466 -9.83E-06	0.00 2.68E+10		100699.	0.00
56.0000	2.58E-04		75.1645 -8.87E-06	0.00 2.68E+10	-3.152	102816.	0.00
56.7000	1.88E-04		52.0865 -7.71E-06	0.00 2.68E+10	-2.343	104933.	0.00
57.4000	1.28E-04		14.8371 -6.41E-06	0.00 2.68E+10	-6.526	428198.	0.00
58.1000	7.99E-05		-30.011 -5.07E-06	0.00 2.68E+10	-4.152	436666.	0.00
58.8000			-56.979 -3.81E-06	0.00 2.68E+10	-2.269	445133.	0.00
	1.58E-05		-70.097 -2.70E-06	0.00 2.68E+10	-0.854	453600.	0.00
	-2.60E-06		-73.085 -1.78E-06	0.00 2.68E+10	0.1428	462067.	0.00
	-1.41E-05		-69.178 -1.05E-06	0.00 2.68E+10	0.7874	470534.	0.00
	-2.02E-05		-61.041 -4.95E-07	0.00 2.68E+10	1.1499	479002.	0.00
02.3000	-2.24E-05	1007.	-50.757 -1.06E-07	0.00 2.68E+10	1.2987	487469.	0.00

63.0000 -2.19E-05	626.2981	-39.862 1.50E-07	0.00 2.68E+10	1.2953 4959	936. 0.00
63.7000 -1.99E-05	337.0890	-29.416 3.01E-07	7 0.00 2.68E+10	1.1920 5044	403. 0.00
64.4000 -1.69E-05	131.9627	-20.082 3.75E-07	7 0.00 2.68E+10	1.0303 5128	870. 0.00
65.1000 -1.36E-05	-0.474	-12.222 3.96E-07	0.00 2.68E+10	0.8411 52133	8. 0.00
65.8000 -1.02E-05	-73.566	-5.980 3.84E-07	0.00 2.68E+10	0.6452 52980	5. 0.00
66.5000 -7.10E-06	-101.129	-1.359 3.57E-07	0.00 2.68E+10	0.4550 5382	72. 0.00
67.2000 -4.24E-06	-96.581	1.7103 3.26E-07	0.00 2.68E+10	0.2758 54673	39. 0.00
67.9000 -1.63E-06	-72.561	3.3213 2.99E-07	0.00 2.68E+10	0.1077 55520	06. 0.00
68.6000 7.87E-07	-40.934	3.5521 2.81E-07	0.00 2.68E+10	-0.05280 5636	74. 0.00
69.3000 3.10E-06	-13.028	2.4447 2.73E-07	0.00 2.68E+10	-0.211 57214	1. 0.00
70.0000 5.37E-06	0.00	0.00 2.71E-07	0.00 2.68E+10 -0	0.371 290304.	0.00

* This analysis computed pile response using nonlinear moment-curvature relationships. Values of total stress due to combined axial and bending stresses are computed only for elastic sections only and do not equal the actual stresses in concrete and steel. Stresses in concrete and steel may be interpolated from the output for nonlinear bending properties relative to the magnitude of bending moment developed in the pile.

 * WARNING: Some values of computed curvature exceeded the maximum curvature calculated or entered by the user Depth = 0.00 ft Computed Curv. = 0.00170 rad/in Maximum Curv. = 4.89E-04 rad/in
 Depth = 0.7000 ft Computed Curv. = 0.00162 rad/in Maximum Curv. = 4.89E-04 rad/in

Output Summary for Load Case No. 1:

Pile-head deflection $= 10.00000000$ inches
Computed slope at pile head $= 0.000000$ radians
Maximum bending moment = -2988666. inch-lbs
Maximum shear force $=$ -32122. lbs
Depth of maximum bending moment $=$ 0.000000 feet below pile head
Depth of maximum shear force $=$ 33.60000000 feet below pile head
Number of iterations $=$ 50
Number of zero deflection points = 4
Pile deflection at ground $= 2.24873570$ inches

Summary of Pile-head Responses for Conventional Analyses

Definitions of Pile-head Loading Conditions:

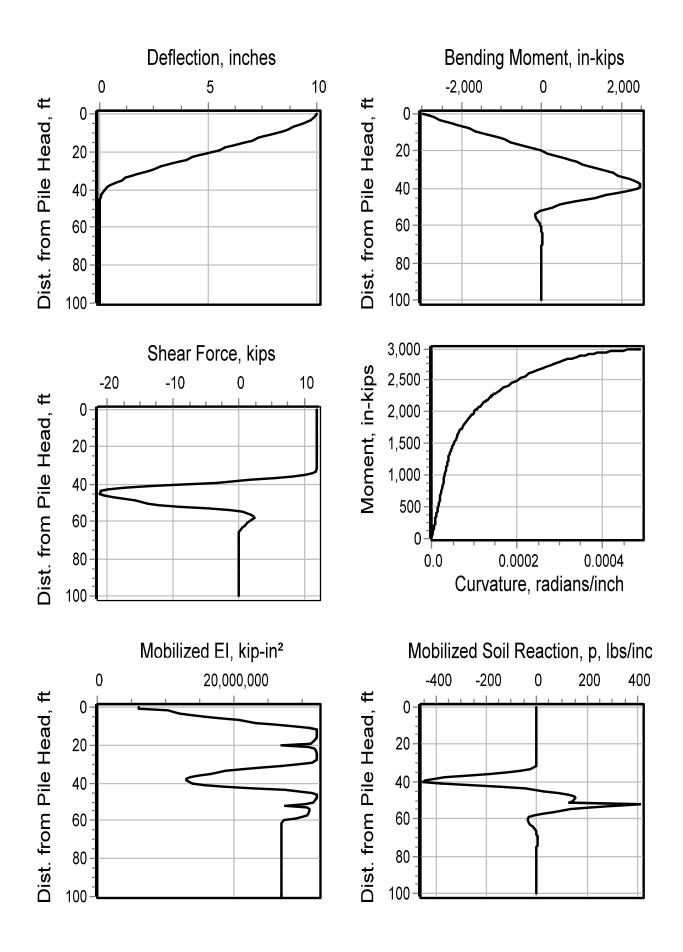
Load Type 1: Load 1 = Shear, V, lbs, and Load 2 = Moment, M, in-lbs Load Type 2: Load 1 = Shear, V, lbs, and Load 2 = Slope, S, radians Load Type 3: Load 1 = Shear, V, lbs, and Load 2 = Rot. Stiffness, R, in-lbs/rad. Load Type 4: Load 1 = Top Deflection, y, inches, and Load 2 = Moment, M, in-lbs Load Type 5: Load 1 = Top Deflection, y, inches, and Load 2 = Slope, S, radians

Load Loa	d	Load	Axial	Pile-hea	d Pile-hea	d Max She	ear Max M	Moment
Case Typ	e Pile-he	ad Type	Pile-head	Loading	Deflection	Rotation	in Pile	in Pile
No. 1	Load 1	2 Lo	ad 2 lbs	inches	radians	lbs in	n-lbs	
1 y, in	10.0000	S, rad	0.00 300	000. 10.0	000 0.0	0 -32122	 229886	66.

Maximum pile-head deflection = 10.0000000000 inches Maximum pile-head rotation = 0.0000000000 radians = 0.000000 deg.

The analysis ended normally.

APPENDIX D – BORING WB-1 LPILE OUTPUT



LPile for Windows, Version 2022-12.010

Analysis of Individual Piles and Drilled Shafts Subjected to Lateral Loading Using the p-y Method © 1985-2022 by Ensoft, Inc. All Rights Reserved

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Files Used for Analysis

Path to file locations: \Offices\TPA\Clients\T\Turrell, Hall & Associates, Inc\City of Naples Pier\10106-2023029 - GEO\Calculations\

Name of input data file: WB-1.lp12d

Name of output report file: WB-1.lp12o

Name of plot output file: WB-1.lp12p

Name of runtime message file: WB-1.lp12r

Date and Time of Analysis

Date: September 12, 2023

Time: 13:08:54

Problem Title

Project Name: City of Naples Pier Job Number: 10106-2023029 Client: Turrel, Hall & Associates Engineer: SG Description: Pier Design

Program Options and Settings

Computational Options: - Conventional Analysis Engineering Units Used for Data Input and Computations: - US Customary System Units (pounds, feet, inches)

Analysis	Control	Options:
----------	---------	----------

- Maximum number of iterations allowed = 500

=

300.0000 in

100

- Deflection tolerance for convergence = 1.0000E-05 in
- Maximum allowable deflection =
- Number of pile increments

Loading Type and Number of Cycles of Loading:

- Cyclic loading specified
- Number of cycles of loading = 5000 cycles
- Use of p-y modification factors for p-y curves not selected
- Analysis uses layering correction (Method of Georgiadis)
- No distributed lateral loads are entered
- Loading by lateral soil movements acting on pile not selected
- Input of shear resistance at the pile tip not selected
- Input of moment resistance at the pile tip not selected
- Computation of pile-head foundation stiffness matrix not selected
- Push-over analysis of pile not selected
- Buckling analysis of pile not selected

Output Options:

- Output files use decimal points to denote decimal symbols.
- Values of pile-head deflection, bending moment, shear force, and soil reaction are printed for full length of pile.
- Printing Increment (nodal spacing of output points) = 1
- No p-y curves to be computed and reported for user-specified depths
- Print using wide report formats

Pile Structural Properties and Geometry

Number of pile sections defined	=	=	1
Total length of pile =	10	00.00) ft
Depth of ground surface below top of pile		=	32.0000 ft

Pile diameters used for p-y curve computations are defined using 2 points.

p-y curves are computed using pile diameter values interpolated with depth over the length of the pile. A summary of values of pile diameter vs. depth follows.

	Depth Below	Pile
Point	Pile Head	Diameter
No.	feet	inches
1	0.000	18.0000
2	100.000	18.0000

Input Structural Properties for Pile Sections:

Pile Section No. 1:

Section 1 is a square prestressed concrete pil	le
Length of section $= 10$	00.000000 ft
Pile Width $= 18.0$	000000 in
Corner Chamfer =	0.750000 in

Ground Slope and Pile Batter Angles

Ground Slope Angle	=	= 0.000 degrees 0.000 radians
Pile Batter Angle	=	= 0.000 degrees 0.000 radians

The soil profile is modelled using 3 layers

Layer 1 is sand, p-y criteria by API RP-2A, 1987

Distance from top of pile to top of layer	= 32.00000 ft
Distance from top of pile to bottom of lay	yer = 42.00000 ft
Effective unit weight at top of layer	= 62.60000 pcf
Effective unit weight at bottom of layer	= 62.60000 pcf
Friction angle at top of layer	= 28.00000 deg.
Friction angle at bottom of layer	= 28.00000 deg.
Subgrade k at top of layer	= 30.00000 pci
6	= 30.000000 pci = 30.000000 pci

Layer 2 is sand, p-y criteria by API RP-2A, 1987

Distance from top of pile to top of layer	= 42.000000 ft
Distance from top of pile to bottom of la	yer = 52.000000 ft
Effective unit weight at top of layer	= 62.60000 pcf
Effective unit weight at bottom of layer	= 62.60000 pcf
Friction angle at top of layer	= 30.000000 deg.
Friction angle at bottom of layer	= 30.000000 deg.
Subgrade k at top of layer	= 30.00000 pci
Subgrade k at bottom of layer	= 30.000000 pci

Layer 3 is sand, p-y criteria by API RP-2A, 1987

Distance from top of pile to top of layer	= 52.000000 ft
Distance from top of pile to bottom of lay	yer $= 132.000000$ ft
Effective unit weight at top of layer	= 62.600000 pcf
Effective unit weight at bottom of layer	= 62.600000 pcf
Friction angle at top of layer	= 40.00000 deg.
Friction angle at bottom of layer	= 40.00000 deg.
Subgrade k at top of layer	= 120.000000 pci
Subgrade k at bottom of layer	= 120.000000 pci

(Depth of the lowest soil layer extends 32.000 ft below the pile tip)

Summary of Input Soil Properties					
Layer Num		Depth	Effectiv Unit W pcf	t. Friction	
1	API	32.0000	62.6000	28.0000	30.0000
	Sand	42.0000	62.6000	28.0000	30.0000
2	API	42.0000	62.6000	30.0000	30.0000
	Sand	52.0000	62.6000	30.0000	30.0000
3	API	52.0000	62.6000	40.0000	120.0000
	Sand	132.0000	62.6000	40.0000	120.0000

Cyclic Loading Type

Cyclic loading criteria were used for computation of p-y curves for all analyses.

Number of cycles of loading = 5000

Concentrated Loads Applied to All Load Cases

Concentrated loads along depth defined using 1 points

Point Depth X Shear Force Moment

City of Naples

0.00000 0.00000 0.00000 1

Pile-head Loading and Pile-head Fixity Conditions Number of loads specified = 1 Load Load Condition Condition Axial Thrust Compute Top y Run Analysis No. Type 1 2 Force, lbs vs. Pile Length ---- -----------1 5 y = 10.000000 in S = 0.0000 in/in 30000. N.A. V = shear force applied normal to pile axis M = bending moment applied to pile head y = lateral deflection normal to pile axis S = pile slope relative to original pile batter angle R = rotational stiffness applied to pile head Values of top y vs. pile lengths can be computed only for load types with specified shear loading (Load Types 1, 2, and 3). Thrust force is assumed to be acting axially for all pile batter angles. Computations of Nominal Moment Capacity and Nonlinear Bending Stiffness _____ Axial thrust force values were determined from pile-head loading conditions Number of Pile Sections Analyzed = 1 Pile Section No. 1: Dimensions of Square Prestressed Pile Section: Length of Section = 100.0000 ftPile Width = 18.000 in Corner Chamfer = 0.750 in Prestressing Strand Details: _____ Strand Type = PCI 270 = 270. ksi = 28000. ksi Yield Stress, fpu Elasticity Modulus, Es Stress-strain curve defined using PCI 270 7-wire Lo-lax equation If eps > 0.0086 fpu (ksi) = 270 - 0.04/(eps-0.007) Number of Reinforcing Strands = 12 Cross-sectional Area of Single Strand = 0.167 sq. in. Concrete Cover Thickness Over Strands = 3.000 in

Prestressing Strand Geometry: -----

Strand No.	Diameter in	Area sq. in	X in	Y
1	0.500	0.167	-5.750	-5.750
2	0.500	0.167	-1.917	-5.750
3	0.500	0.167	1.917	-5.750
4	0.500	0.167	5.750	-5.750
5	0.500	0.167	5.750	0.000
6	0.500	0.167	5.750	3.833
7	0.500	0.167	5.750	5.750
8	0.500	0.167	1.917	5.750
9	0.500	0.167	-1.917	5.750
10	0.500	0.167	-5.750	5.750
11	0.500	0.167	-5.750	0.000

Yes

12 0.500 0.167 -5.750 -3.833

Computation of Loss of Prestress:

Initial Prestressing Force	=	378.000 kips
Fraction of Loss of Prestress	=	0.100
Effective Prestressing Force After Losse	es	= 340.200 kips
Area of Concrete, Ac	=	320.871 sq.in
Area of Steel, As	=	2.004 sq.in
Stress in Concrete After Losses, f_pc		= 1.060 ksi
Stress in Steel After Losses	=	-169.760 ksi
Compressive Strain in Concrete After Lo	osses	= 0.0002941
Tensile Strain in Steel After Losses		-0.0060629
Axial Tension Load for Cracking of Cor	ncrete	= -413.727 kips

Estimated Structural Capacities Computed Using PCI Equations:

Nom. Axial Cap., $Pn = (0.85 \text{ fc} - 0.60 \text{ f pc}) \text{ Ag}$	=	892.380 kips
Unfac. Axial Load Cap. N = $(0.33 \text{ fc} - 0.27 \text{ f pc})$ A	g =	333.767 kips
Axial Capacity in Tension, Nt = As fpu =	-5	41.080 kips
Nom. Moment Capacity, $Mn = 0.37 D$ As fpu	=	3603.593 in-kip

Note: The estimate of nominal moment capacity is based on equations that assume compressive strength of concrete is 6,000 psi (41.4 MPa), the value of prestress after losses is 700 psi (4.83 MPa), and axial thrust force is zero. When input values for these factors are different, the estimated value of nominal moment capacity will differ from the capacity computed by LPile and should be considered only as an approximate check.

Concrete Properties:

Compressive Strength of Concrete	= 4000. psi
Modulus of Elasticity of Concrete	= 3604997. psi
Modulus of Rupture of Prestressed Concrete	= -252.98221 psi
Compression Strain at Peak Stress	= 0.001886
Tensile Strain at Fracture of Concrete	-0.0000606
Maximum Coarse Aggregate Size	= 0.750000 in

Number of Axial Thrust Force Values Determined from Pile-head Loadings = 1

Axial Thrust Force			
kips			
30.000			

Definitions of Run Messages and Notes:

- C = concrete in section has cracked in tension.
- Y = stress in reinforcing steel has reached yield stress.
- T = ACI 318 criteria for tension-controlled section met, tensile strain in reinforcement exceeds 0.005 while simultaneously compressive strain in concrete more than 0.003. See ACI 318-14, Section 21.2.3.
- Z = depth of tensile zone in concrete section is less than 10 percent of section depth.

Bending Stiffness (EI) = Computed Bending Moment / Curvature. Position of neutral axis is measured from edge of compression side of pile. Compressive stresses and strains are positive in sign. Tensile stresses and strains are negative in sign.

Axial Thrust Force = 30.000 kips

Bending	Bending	Bending 1	Depth to	Max Com	p Max	Tens Ma	x Conc	Max Steel Run
Curvature	Moment	Stiffness	N Axis	Strain	Strain	Stress	Stress	Msg
rad/in. i	n-kip kip	-in2 in	in/in	in/in	ksi	ksi		
								-
0.00000125	33.4876630	26790130). 237.966	3219 0.0	005916	0.0002750	1.161	6959 -164.849810
0.00000250	73.9639266	5 29585571	. 123.497	7119 0.0	006028	0.0002637	1.201	4754 -165.063592
0.00000375	114.436653	0 3051644	1. 85.348	1688 0.0	006142	0.0002526	1.241	0621 -165.276662

0.00000500	154.904028	3098080	06. 66.27839	0.00062	255 0.00024	414 1.2804543 -165.489020
0.00000625	195.364237	76 3125827	78. 54.84052	0.00063	369 0.00023	303 1.3196499 -165.700667
0.00000750	235.815466					
0.00000875	276.255900					
0.00001000	316.683723					
0.000011000	357.097116					
0.00001250	397.494263					
0.00001375	437.873339					
0.00001500	478.232530					
0.00001625	518.570011					
0.00001750	558.883959					
0.00001875	599.172547	71 3195586	59. 24.41291	18 0.00075	518 0.00012	202 1.7003841 -167.777923
0.00002000	639.433947	79 3197169	97. 23.46893	395 0.0007e	635 0.00010	094 1.7372938 -167.981721
0.00002125	679.666332	20 3198429	98. 22.63720	0.00077	751 0.00009	854 1.7739844 -168.184803
0.00002250	719.867867	75 3199412	27. 21.89900	0.00078	868 0.00008	773 1.8104540 -168.387169
0.00002375	760.036720					
0.00002500	800.171054					
0.00002625	840.269029					
0.00002025	880.328803					
0.00002750	920.348533					
0.00003000	960.326369					
0.00003125	1000.	32008335.	18.4077353	0.0008693	0.00001274	
0.00003250	1040.	32004583.	18.0655556	0.0008812	0.00000213	
0.00003375	1080.	31999654.	17.7494688	0.0008931	-0.0000846	
0.00003500	1120.	31993194.	17.4566372	0.0009051	-0.00001902	2.1625665 -170.371346
0.00003625	1159.	31984802.	17.1846033	0.0009170	-0.00002956	5 2.1964631 -170.565942
0.00003750	1199.	31974213.	16.9312432	0.0009290	-0.00004008	3 2.2301010 -170.759963
0.00003875	1238.	31961265.	16.6947129	0.0009410	-0.00005058	
0.00004000	1278.	31945878.	16.4734040	0.0009530	-0.00006106	
0.00004125	1303.	31599225.	16.2323869	0.0009637	-0.00007291	
0.00004250	1334.	31377461.	16.0161981	0.0009748	-0.00008431	
0.00004250	1362.	31132745.	15.8087775	0.0009857	-0.00009587	
0.00004575	1302.	30719806.	15.5925809	0.0009857	-0.000108	2.4115876 -172.070404 C
0.00004625	1408.	30442557.	15.4005940	0.0010064	-0.000120	2.4395295 -172.303355 C
0.00004750	1432.	30154422.	15.2159047	0.0010169	-0.000132	2.4668646 -172.540203 C
0.00004875	1449.	29730588.	15.0219969	0.0010264	-0.000145	2.4915847 -172.803033 C
0.00005125	1493.	29124024.	14.6843192	0.0010467	-0.000170	2.5432855 -173.296824 C
0.00005375	1532.	28505346.	14.3690356	0.0010664	-0.000195	2.5928679 -173.804404 C
0.00005625	1569.	27884531.	14.0737294	0.0010857	-0.000221	2.6404708 -174.324908 C
0.00005875	1603.	27277754.	13.7977358	0.0011047	-0.000247	2.6864213 -174.855186 C
0.00006125	1640.	26769272.	13.5525393	0.0011242	-0.000272	2.7327938 -175.370997 C
0.00006375	1669.	26177891.	13.3067066	0.0011424	-0.000299	2.7753621 -175.922911 C
0.00006625	1701.	25677029.	13.0877131	0.0011612	-0.000325	2.8184689 -176.459179 C
0.00006875	1727.	25113329.	12.8668547	0.0011787	-0.000353	2.8580318 -177.030325 C
0.00007125	1744.	24477308.	12.6374326	0.0011945	-0.000382	2.8931001 -177.650323 C
					-0.000382	
0.00007375	1771.	24011378.	12.4497045	0.0012123		
0.00007625	1797.	23561542.	12.2719928	0.0012298	-0.000437	2.9695351 -178.785410 C
0.00007875	1821.	23127439.	12.1032849	0.0012472	-0.000464	3.0061630 -179.360562 C
0.00008125	1845.	22708724.	11.9429096	0.0012645	-0.000492	3.0417947 -179.940291 C
0.00008375	1868.	22305022.	11.7904970	0.0012816	-0.000520	3.0764768 -180.524205 C
0.00008625	1890.	21913749.	11.6444612	0.0012984	-0.000548	3.1101444 -181.113463 C
0.00008875	1911.	21536509.	11.5056002	0.0013152	-0.000576	3.1429305 -181.706445 C
0.00009125	1932.	21173025.	11.3729047	0.0013319	-0.000605	3.1748834 -182.302649 C
0.00009375	1952.	20823015.	11.2458722	0.0013484	-0.000633	3.2060518 -182.901532 C
0.00009625	1971.	20482760.	11.1242425	0.0013648	-0.000662	3.2362801 -183.505643 C
0.00009875	1990.	20155010.	11.0077486	0.0013811	-0.000690	3.2657761 -184.112040 C
0.0001013	2009.	19839353.	10.8960617	0.0013973	-0.000719	3.2945774 -184.720257 C
0.0001038	2026.	19531975.	10.7883074	0.0014134	-0.000748	3.3224925 -185.333537 C
0.0001063	2020.	19236480.	10.6855288	0.0014194	-0.000777	3.3498019 -185.947518 C
0.0001088	2061.	18949342.	10.5859477	0.0014254	-0.000806	3.3763227 -186.565360 C
0.0001088	2061. 2077.	18949342.	10.3839477	0.0014433	-0.000806	3.4022046 -187.184709 C
0.0001138	2093.	18403288.	10.3984068	0.0014769	-0.000865	3.4273864 -187.806752 C
0.0001163	2109.	18143094.	10.3097704	0.0014926	-0.000894	3.4519278 -188.430585 C
0.0001188	2125.	17890574.	10.2240732	0.0015082	-0.000923	3.4758006 -189.056849 C
0.0001213	2140.	17646302.	10.1416566	0.0015238	-0.000953	3.4990861 -189.684173 C
0.0001238	2154.	17408431.	10.0616277	0.0015392	-0.000982	3.5216792 -190.314673 C
0.0001263	2169.	17179116.	9.9850224	0.0015547	-0.001012	3.5437910 -190.944376 C
0.0001288	2183.	16954459.	9.9099904	0.0015700	-0.001042	3.5651326 -191.579113 C
0.0001313	2197.	16737791.	9.8381546	0.0015854	-0.001071	3.5860210 -192.212636 C
0.0001338	2210.	16526561.	9.7682808	0.0016006	-0.001101	3.6062668 -192.848913 C
0.0001363	2224.	16321148.	9.7005870	0.0016000	-0.001101	3.6259373 -193.486680 C
0.0001303	2224.	16122604.	9.6356375	0.0016158	-0.001151	3.6451572 -194.123240 C
		15927742.		0.0016310	-0.001101	
0.0001413	2250.		9.5717846			3.6636614 -194.764639 C
0.0001438	2262.	15738885.	9.5103001	0.0016612	-0.001220	3.6816956 -195.405433 C
0.0001463	2275.	15555981.	9.4512059	0.0016763	-0.001250	3.6992817 -196.045030 C
0.0001488	2287.	15376073.	9.3928571	0.0016913	-0.001280	3.7161599 -196.689881 C
0.0001588	2334.	14704251.	9.1778147	0.0017511	-0.001401	3.7787943 -199.269396 C

0.0001688	2379.	14096095.	8.9863495	0.0018105	-0.001521	3.8333529	-201.858068 C
0.0001788	2421.	13542668.	8.8152367	0.0018698	-0.001642	3.8800565	-204.452250 C
0.0001888	2461.	13036527.	8.6618235	0.0019290	-0.001763	3.9190494	-207.048726 C
0.0001988	2499.	12571616.	8.5241403	0.0019883	-0.001883	3.9504287	-209.643545 C
0.0002088	2535.	12141973.	8.3997074	0.0020475	-0.002004	3.9741592	-212.237732 C
0.0002188	2569.	11743397.	8.2856660	0.0021066	-0.002125	3.9902528	-214.828497 C
0.0002288	2602.	11373335.	8.1869768	0.0021669	-0.002245	3.9986937	-217.404150 C
0.0002388	2632.	11025795.	8.0953957	0.0022269	-0.002365	3.9996375	-219.977564 C
0.0002488	2662.	10699877.	8.0151247	0.0022879	-0.002484	3.9999778	-222.522997 C
0.0002588	2689.	10391734.	7.9420276	0.0023491	-0.002603	3.9982078	-225.061282 C
0.0002688	2715.	10101594.	7.8775611	0.0024112	-0.002720	3.9986040	-227.575127 C
0.0002788	2740.	9827886.	7.8203782	0.0024740	-0.002838	3.9988142	-230.067855 C
0.0002888	2763.	9568591.	7.7680411	0.0025371	-0.002954	3.9987712	-232.553299 C
0.0002988	2785.	9323498.	7.7218435	0.0026010	-0.003071	3.9985057	-235.016300 C
0.0003088	2807.	9091465.	7.6810779	0.0026656	-0.003186	3.9979502	-237.457837 C
0.0003188	2828.	8871402.	7.6448767	0.0027309	-0.003301	3.9982847	-239.881144 C
0.0003288	2848.	8662021.	7.6115852	0.0027964	-0.003415	3.9999684	-242.297825 C
0.0003388	2867.	8462957.	7.5823343	0.0028626	-0.003529	3.9995955	-244.694473 C
0.0003488	2885.	8272105.	7.5559312	0.0029292	-0.003642	3.9985570	-246.040095 C
0.0003588	2899.	8081599.	7.5282729	0.0029949	-0.003757	3.9977083	-247.196527 C
0.0003688	2911.	7893428.	7.5002560	0.0030598	-0.003872	3.9996897	-248.254574 C
0.0003788	2921.	7711999.	7.4739259	0.0031249	-0.003987	3.9978177	-249.217943 C
0.0003888	2930.	7537498.	7.4480849	0.0031895	-0.004102	3.9999664	-250.102906 C
0.0003988	2939.	7369691.	7.4239914	0.0032544	-0.004217	3.9983367	-250.913913 C
0.0004088	2947.	7208593.	7.4014042	0.0033194	-0.004332	3.9999980	-251.660116 C
0.0004188	2954.	7053594.	7.3806718	0.0033848	-0.004447	3.9982669	-252.347687 C
0.0004288	2960.	6904704.	7.3613805	0.0034503	-0.004561	3.9999865	-252.984477 C
0.0004388	2967.	6761349.	7.3436107	0.0035161	-0.004675	3.9975875	-253.574767 C
0.0004488	2972.	6623337.	7.3268848	0.0035820	-0.004790	3.9998410	-254.124757 C
0.0004588	2977.	6489998.	7.3111232	0.0036481	-0.004904	3.9959638	-254.638407 C
0.0004688	2982.	6360950.	7.2959857	0.0037141	-0.005018	3.9991673	-255.120118 C
0.0004788	2985.	6235787.	7.2804267	0.0037796	-0.005132	3.9984337	-255.575099 C
0.0004888	2989.	6114827.	7.2654883	0.0038451	-0.005246	3.9971018	-256.003107 C

Summary of Results for Nominal Moment Capacity for Section 1 _____

Moment values interpolated at maximum compressive strain = 0.003 or maximum developed moment if pile fails at smaller strains.

Load	Axial Thrust	Nominal N	Mom. Cap.	Max. Comp.	Max. Tens.
No.	kips	in-kip	Strain	Strain	
1	30.000	2900.176	0.00300	000 -0.00376	582

Note that the values of moment capacity in the table above are not factored by a strength reduction factor (phi-factor).

In ACI 318, the value of the strength reduction factor depends on whether the transverse reinforcing steel bars are tied hoops (0.65) or spirals (0.75).

The above values should be multiplied by the appropriate strength reduction factor to compute ultimate moment capacity according to ACI 318, or the value required by the design standard being followed.

The following table presents factored moment capacities and corresponding bending stiffnesses computed for common resistance factor values used for reinforced concrete sections.

Axial Load No.		Ax. Thrust	Moment C	Ult. (Fac) Cap Ax. Thru s in-kips	ıst Mom	ent Cap at Ult Mom
1	0.65	30.000000	2900.	19.500000	1885.	22001661.
1	0.75	30.000000	2900.	22.500000	2175.	17078690.
1	0.90	30.000000	2900.	27.000000	2610.	11277202.

	Top of Ec Layer To	quivalent op Depth S	ame Laver	Layer is	F0	F1
Layer		Below			Integral	Integral
		Grnd Surf				
	ft ft	Above	Rock La	yer lbs	lbs	
1	32.0000	0.00 1	N.A. N	lo 0.	00 4024	8.
2	42.0000	9.4404	Yes	No 40	248. 266	5873.
3	52.0000	14.5573	Yes	No 30	7121. N	.A.

Notes: The F0 integral of Layer n+1 equals the sum of the F0 and F1 integrals for Layer n. Layering correction equivalent depths are computed only for soil types with both shallow-depth and deep-depth expressions for peak lateral load transfer. These soil types are soft and stiff clays, non-liquefied sands, and cemented c-phi soil.

Computed Values of Pile Loading and Deflection for Lateral Loading for Load Case Number 1

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Pile-head conditions are Displacement and Pile-head Rotation (Loading Type 5)

Displacement of pile head	= 10.000000 inches
Rotation of pile head	= 0.000E+00 radians
Axial load on pile head	= 30000.0 lbs

Depth Deflect. Bending Shear Slope T X y Moment Force S Stress feet inches in-lbs lbs radians psi*	otal Bending Soil Res. Soil Spr. Distrib. Stiffness p Es*H Lat. Load lb-in^2 lb/inch lb/inch lb/inch
0.00 10.0000 -2988700. 11781. 0.00	0.00 6.11E+09 0.00 0.00 0.00
1.0000 9.9648 -2846322. 117770.00573	0.00 6.11E+09 0.00 0.00 0.00
2.0000 9.8626 -2701934. 117770.01010	0.00 1.02E+10 0.00 0.00 0.00
3.0000 9.7224 -2556405. 117770.01298	0.00 1.19E+10 0.00 0.00 0.00
4.0000 9.5512 -2409948. 117770.01532	0.00 1.37E+10 0.00 0.00 0.00
5.0000 9.3546 -2262729. 117770.01724	0.00 1.57E+10 0.00 0.00 0.00
6.0000 9.1373 -2114889. 117770.01881	0.00 1.80E+10 0.00 0.00 0.00
7.0000 8.9032 -1966543. 117770.02009	0.00 2.06E+10 0.00 0.00 0.00
8.0000 8.6553 -1817784. 117770.02113	0.00 2.32E+10 0.00 0.00 0.00
9.0000 8.3961 -1668686. 117770.02198	0.00 2.62E+10 0.00 0.00 0.00
10.0000 8.1277 -1519313. 117770.02268	0.00 2.87E+10 0.00 0.00 0.00
11.0000 7.8517 -1369711. 117770.02327	0.00 3.10E+10 0.00 0.00 0.00
12.0000 7.5693 -1219918. 117770.02376	0.00 3.20E+10 0.00 0.00 0.00
13.0000 7.2815 -1069960. 117770.02419	0.00 3.20E+10 0.00 0.00 0.00
14.0000 6.9888 -919858. 117770.02456	0.00 3.20E+10 0.00 0.00 0.00
15.0000 6.6920 -769632. 117770.02488	0.00 3.20E+10 0.00 0.00 0.00
16.0000 6.3917 -619301. 117770.02514	0.00 3.20E+10 0.00 0.00 0.00
17.0000 6.0886 -468887. 117770.02534	0.00 3.19E+10 0.00 0.00 0.00
18.0000 5.7834 -318410. 117770.02549	0.00 3.17E+10 0.00 0.00 0.00
19.0000 5.4768 -167889. 117770.02559	0.00 3.11E+10 0.00 0.00 0.00
20.0000 5.1694 -17345. 117770.02562	0.00 2.68E+10 0.00 0.00 0.00
21.0000 4.8619 133202. 117770.02560	0.00 3.08E+10 0.00 0.00 0.00 0.00 2.1(E+10 0.00 0.00 0.00
22.0000 4.5550 283731. 117770.02552	0.00 3.16E+10 0.00 0.00 0.00 0.00 2.18E+10 0.00 0.00 0.00
23.0000 4.2494 434220. 117770.02538	0.00 3.18E+10 0.00 0.00 0.00
24.0000 3.9457 584651. 117770.02519	0.00 3.19E+10 0.00 0.00 0.00
25.0000 3.6448 735003. 117770.02494	0.00 3.20E+10 0.00 0.00 0.00
26.0000 3.3471 885255. 117770.02464	0.00 3.20E+10 0.00 0.00 0.00
27.0000 3.0534 1035388. 117770.02428	0.00 3.20E+10 0.00 0.00 0.00
28.0000 2.7643 1185381. 117770.02386	0.00 3.20E+10 0.00 0.00 0.00
29.0000 2.4806 1335214. 117770.02339	0.00 3.14E+10 0.00 0.00 0.00 0.00 2.02E+10 0.00 0.00 0.00
30.0000 2.2030 1484863. 117770.02283	0.00 2.92E+10 0.00 0.00 0.00
31.0000 1.9328 1634293. 117770.02216	0.00 2.68E+10 0.00 0.00 0.00
32.0000 1.6713 1783459. 117770.02134	0.00 2.38E+10 0.00 0.00 0.00
33.0000 1.4206 1932302. 116300.02034	0.00 2.12E+10 -24.473 206.7326 0.00
34.0000 1.1830 2077226. 110990.01913	0.00 1.87E+10 -63.966 648.8329 0.00
35.0000 0.9615 2212459. 100050.01766	0.00 1.65E+10 -118.477 1479. 0.00
36.0000 0.7593 2330051. 81660.01590	0.00 1.48E+10 -188.004 2971. 0.00
37.0000 0.5798 2419889. 54040.01389	0.00 1.36E+10 -272.299 5636. 0.00
38.0000 0.4260 2469745. 15690.01167	0.00 1.29E+10 -366.867 10334. 0.00
39.0000 0.2998 2465946 . -3302 . -0.00938	0.00 1.30E+10 -444.914 17811. 0.00
40.0000 0.2009 239725886880.00720	0.00 1.38E+10 -452.774 27046. 0.00
41.0000 0.1270 2262623136570.00530	0.00 1.57E+10 -375.457 35489. 0.00
42.0000 0.07372 2073300174580.00377	
43.0000 0.03643 1846351198670.00262	0.00 2.27E+10 -143.529 47282. 0.00

44.0000	0.01085	1598382.	21009.	-0.00178	0.00	2.73E+10	-46.853	51820.	0.00
45.0000	-0.00631			-0.00117	0.00	3.13E+10	29.5359	56154.	0.00
46.0000	-0.01729	1092513.	-20413.	-7.10E-04	0.00	3.20E+10	87.0834	60436.	0.00
47.0000	-0.02335	854005	19135.	-3.45E-04	0.00	3.20E+10	125.9628	64725.	0.00
48.0000	-0.02557	633521	17497.	-6.62E-05	0.00	3.20E+10	147.1266	69035.	0.00
49.0000	-0.02494	434137	15699.	1.35E-04	0.00	3.18E+10	152.4822	73364.	0.00
50.0000	-0.02235	256651	13916.	2.65E-04	0.00	3.15E+10	144.6881	77702.	0.00
51.0000	-0.01858	99966. -1	12286.	3.34E-04	0.00	3.03E+10	127.0019	82042.	0.00
52.0000	-0.01433	-38446	9060.	3.45E-04	0.00	2.74E+10	410.6193	343815.	0.00
53.0000	-0.01029	-117722.	-4731.	3.14E-04	0.00	3.06E+10	310.8378	362524.	0.00
54.0000	-0.00680	-152221.	-1574.	2.61E-04	0.00	3.10E+10	215.3829	380019.	0.00
55.0000	-0.00402	-155684. 5	17.4358	3 2.02E-04	0.00) 3.10E+10	133.173	6 397395.	0.00
56.0000	-0.00197	-139948.	1724.	1.44E-04	0.00	3.08E+10	67.9103	414710.	0.00
57.0000	-5.62E-04	-114413.	2253.	9.44E-05	0.00	3.05E+10	20.2378	431999.	0.00
58.0000	3.01E-04	-85948.	2307.	5.47E-05	0.00	2.99E+10	-11.263	449280.	0.00
59.0000	7.51E-04	-59092.	2064.	2.52E-05	0.00	2.90E+10	-29.180	466559.	0.00
60.0000	9.06E-04	-36430.	1670.	4.94E-06	0.00	2.72E+10	-36.543	483838.	0.00
61.0000	8.69E-04	-19023.		-7.37E-06		2.68E+10	-36.292	501119.	0.00
62.0000	7.30E-04			-1.32E-05		2.68E+10		518399.	0.00
63.0000	5.53E-04			7 -1.45E-05		0 2.68E+1			
64.0000	3.81E-04			-1.32E-05	0.00		-17.571	552960.	0.00
65.0000	2.36E-04			-1.07E-05		2.68E+10	-11.199	570240.	0.00
66.0000	1.25E-04			-7.81E-06		2.68E+10		587520.	0.00
67.0000	4.82E-05			-5.16E-06		2.68E+10		604800.	0.00
	9.78E-07			-3.00E-06		2.68E+10	-0.05069	622080.	0.00
	-2.38E-05			-1.42E-06		2.68E+10	1.2665	639360.	0.00
	-3.30E-05			-3.75E-07		2.68E+10	1.8074	656640.	0.00
	-3.28E-05			3 2.26E-07	0.00			673920.	0.00
	-2.76E-05			5.06E-07		2.68E+10			0.00
	-2.06E-05			5.73E-07		2.68E+10	1.2187	708480.	0.00
	-1.38E-05			5.19E-07		2.68E+10	0.8374	725760.	0.00
	-8.19E-06			4.10E-07	0.00	2.68E+10	0.5071	743040.	0.00
	-4.01E-06			2.89E-07		2.68E+10	0.2540	760320.	0.00
	-1.25E-06		4.4221	1.81E-07	0.00		0.08096	777600.	0.00
			4.7713		0.00	2.68E+10	-0.02277	794880.	0.00
79.0000	1.09E-06		4.1935	3.89E-08	0.00	2.68E+10	-0.07353	812160.	0.00
80.0000	1.09E-00 1.28E-06			3.04E-08	0.00	2.68E+10	-0.08832	829440.	0.00
81.0000	1.28E-00 1.16E-06			-1.55E-08		2.68E+10 2.68E+10	-0.08832	829440. 846720.	0.00
81.0000	9.06E-07			-1.35E-08 -2.22E-08			-0.06520	864000.	0.00
82.0000	9.00E-07 6.26E-07			-2.22E-08		2.68E+10 2.68E+10	-0.04598	884000. 881280.	0.00
83.0000	0.20E-07 3.81E-07			-2.18E-08		2.08E+10 2.68E+10			0.00
85.0000	1.95E-07			-1.30E-08		2.68E+10 2.68E+10			0.00
	7.00E-08			-8.27E-09	0.00		-0.00544	933120.	0.00
	-3.37E-09			-8.27E-09 -4.52E-09			2.67E-04	950400.	
					0.00			950400. 967680.	0.00
	-3.85E-08			-1.89E-09	0.00	2.68E+10	0.00310		0.00
	-4.87E-08			-2.70E-10		2.68E+10	0.00400	984960.	0.00
	-4.50E-08	1.1412 -(2.68E+10			0.00
	-3.51E-08			8.74E-10		2.68E+10		1019520.	0.00
	-2.40E-08					2.68E+10	0.00207	1036800.	0.00
	-1.43E-08		.00816	7.05E-10		2.68E+10	0.00126	1054080.	0.00
	-7.08E-09		.00319	5.01E-10	0.00	2.68E+10			0.00
	-2.31E-09			3.14E-10		2.68E+10			0.00
	4.47E-10		.00925	1.71E-10		2.68E+10			0.00
	1.80E-09			7.81E-11		2.68E+10			0.00
	2.32E-09			2.80E-11		2.68E+10			
	2.47E-09			8.38E-12		2.68E+10			
100.0000	2.52E-09	0.00	0.00 4	.40E-12	0.00 2	.68E+10 -2	.4/E-04	38/320.	0.00

* This analysis computed pile response using nonlinear moment-curvature relationships. Values of total stress due to combined axial and bending stresses are computed only for elastic sections only and do not equal the actual stresses in concrete and steel. Stresses in concrete and steel may be interpolated from the output for nonlinear bending properties relative to the magnitude of bending moment developed in the pile.

* WARNING: Some values of computed curvature exceeded the maximum curvature calculated or entered by the user Depth = 0.00 ft Computed Curv. = 4.89E-04 rad/in Maximum Curv. = 4.89E-04 rad/in

Output Summary for Load Case No. 1:

Pile-head deflection $= 10.00000000$ inches
Computed slope at pile head $= 0.000000$ radians
Maximum bending moment $=$ -2988700. inch-lbs
Maximum shear force $=$ -21113. lbs
Depth of maximum bending moment = 0.000000 feet below pile head
Depth of maximum shear force = 45.00000000 feet below pile head

Number of iterations=53Number of zero deflection points=6Pile deflection at ground=1.67127714 inches

Summary of Pile-head Responses for Conventional Analyses

Definitions of Pile-head Loading Conditions:

Load Type 1: Load 1 = Shear, V, lbs, and Load 2 = Moment, M, in-lbs Load Type 2: Load 1 = Shear, V, lbs, and Load 2 = Slope, S, radians Load Type 3: Load 1 = Shear, V, lbs, and Load 2 = Rot. Stiffness, R, in-lbs/rad. Load Type 4: Load 1 = Top Deflection, y, inches, and Load 2 = Moment, M, in-lbs Load Type 5: Load 1 = Top Deflection, y, inches, and Load 2 = Slope, S, radians

Load LoadLoadAxialPile-headPile-headPile-headMax MomentCase TypePile-headTypePile-headLoadingDeflectionRotationin Pilein PileNo. 1Load 12Load 2lbsinchesradianslbsin-lbs1y, in10.0000S, rad0.0030000.10.00000.00-21113.-2988700.

Maximum pile-head deflection = 10.0000000000 inches Maximum pile-head rotation = 0.0000000000 radians = 0.000000 deg.

The analysis ended normally.

APPENDIX E - LIMITATIONS

LIMITATIONS

The findings, conclusions and recommendations presented in this report represent our professional opinions concerning subsurface conditions at the site. The opinions presented are relative to the dates of our site work and should not be relied on to represent conditions at later dates or at locations not explored. The opinions included herein are based on information provided to us, the data obtained at specific locations during the study and our past experience. If additional information becomes available that might impact our geotechnical opinions, it will be necessary for NOVA to review the information, reassess the potential concerns, and re-evaluate our conclusions and recommendations.

Regardless of the thoroughness of a geotechnical exploration, there is the possibility that conditions between borings will differ from those encountered at specific boring locations, that conditions are not as anticipated by the designers and/or the contractors, or that either natural events or the construction process have altered the subsurface conditions. These variations are an inherent risk associated with subsurface conditions in this region and the approximate methods used to obtain the data. These variations may not be apparent until construction.

The professional opinions presented in this geotechnical report are not final. Field observations and foundation installation monitoring by the Geotechnical Engineer, as well as soil density testing and other quality assurance functions associated with site earthwork and foundation construction, are an extension of this report. Therefore, NOVA should be retained by the owner to observe all earthwork and foundation construction to document that the conditions anticipated in this study actually exist, and to finalize or amend our conclusions and recommendations. NOVA is not responsible or liable for the conclusions and recommendations presented in this report if NOVA does not perform these observation and testing services.

This report is intended for the sole use of **Turrell Hall & Associates Inc.** only. The scope of work performed during this study was developed for purposes specifically intended by **Turrell Hall & Associates Inc.** and may not satisfy other users' requirements. Use of this report or the findings, conclusions or recommendations by others will be at the sole risk of the user. NOVA is not responsible or liable for the interpretation by others of the data in this report, nor their conclusions, recommendations or opinions.

Our professional services have been performed, our findings obtained, our conclusions derived, and our recommendations prepared in accordance with generally accepted geotechnical engineering principles and practices in the State of Florida. This warranty is in lieu of all other statements or warranties, either expressed or implied.



PROJECT MANUAL NAPLE PIER RECONSTRUCTION

Exhibit A: Project Scope & Schedule Exhibit B: Plans & Specifications Exhibit C: State & Federal Permits

EXHIBIT "A" PROJECT SCOPE & SCHEDULE

Purpose of Work: The Naples Pier is an iconic feature of the town dating back to the late 1800s. The pier was largely destroyed by Hurricane Ian on Sept 28th, 2022. The storm collapsed the outer portion of the 1000-foot structure when a combination of wind, waves, currents, and related scour toppled the pilings that supported it.

The purpose of the proposed project is to remove remnants of the old pier and rebuild it in the same location but stronger, higher, and more resilient to future storms and hurricanes. This requires a supporting structure of new concrete pilings, concrete bents, and beams, which are designed to remain in place even if a future storm removes the decking and superstructure. The walking surface will consist of IPE hardwood which made up the attractive and popular surface of the old pier. The new pier will be the same 1000' length and 12' width as the old pier but will have bump outs to accommodate benches with unobstructed viewpoints. The superstructure will be made up by two structures mid-way and one at the end of the pier with iconic Polynesian roof lines that differentiate Naples Pier from all others in Florida.

<u>Scope of Work:</u> Work includes all labor, materials, tools, equipment, and services necessary to perform all operations in connection with the project. Refer to attached engineering, architectural and electrical drawings for details. Upland access to the site will be provided via the lay-down yard landward of the pier where the existing landscaping and flagpole can be removed (area will be restored by the city post construction). Additional parking for work crews and trucks will be provided in the nearby pier lot shown on the pier construction access plan. Additional/alternate beach access will be at the end of 17th Ave South (area to be restored by city).

Once the contractor has mobilized men and equipment to the site, demolition of pier remains and any other debris will be required. This will involve removal of all portions of the pier that are still standing and all portions which are now submerged. Clean concrete debris may be accepted at one or more of the offshore artificial reefs, in which case the material can be loaded onto barges and transported to the designated reef site. If a reef site is not available, as determined by the City, the material will have to be hauled from shore to an inland landfill.

A trestle may be constructed adjacent to where the pier will be constructed which will allow for work to safely continue in rough weather when work from a barge would be stopped. Such work stoppages can last for weeks when a strong cold front moves through SW Fla and winds continue to create large waves. The trestle would typically be made up of steel pilings which are driven into the bottom and topped with prefabricated caps and decking which can support a large crane, trucks and other equipment. It would run the entire length of the pier and will be entirely removed when the pier is done.

Large cranes on the trestle and/or on barges will drive concrete piles up to 100' in length to depths specified in the plans. Precast concrete bents may be secured atop the piles upon Engineer of Record's (EOR's) approval of the contractor's plans. Options for pre-cast alternatives may be considered. Pour in place bents will be poured with form work around the piles. Longitudinal concrete beams or "girders" will span between the bents. Large wood stringers will then span above the bents forming the base framing where IPE decking will be secured for the walking surface and bump outs. IPE will also be used to form the railings which will in turn support

lighting for nighttime use. The pier superstructure of mid and end structures will consist of wood posts and beams and other traditional building and roofing materials. Utilities including water, fire protection and electrical will be run in conduits under the decking with spares for future use. Electrical service will be supplied to lights on the railing along the length of the pier and on the superstructure. All pier lighting will have to meet requirements for sea turtles which nest on shore. Power will also be supplied to NOAA for water level, wind, and other sensors on the pier's end. A hatch on the ramp approaching the pier end will enclose an area where a future underwater camera may rise up into it. Power and water will be supplied inside the camera enclosure which will remain empty until the pier is complete.

Additional structures on shore include a new concession area and shade structures, steps down to the beach and various gates that can be deployed. The concession area will have food prep equipment and the existing bathrooms and showers will be renovated with additional shade structures included. The existing bathroom structure on the south side may be removed (and replaced) for construction and trestle access.

<u>Schedule of Work:</u> Construction timeline must not exceed eighteen (18) months from commencement date to final completion date. Daily work schedule is Monday through Saturday 7AM to 6PM with pile driving activities limited to Monday through Friday 8AM-4PM. Must be able to work in World Meteorological Organization (WMO) state of sea degree 3 (waves of 1.6 to 4.1 feet high) without delay in progress.

Prior to commencement of work, Contractor must provide weather preparedness plan in writing to the Owner should unfavorable weather patterns develop during construction, the Contractor and Permittee /Owner shall mutually agree upon a plan to secure the site and/or materials. No reimbursement or additional cost will be applied to Permittee/Owner for carrying out the plan. The Contractor shall not be entitled to, and Owner shall not be responsible for, any Claim for additional compensation as a result of Contractor's compliance with the weather preparedness plan.

EXHIBIT "B" PLANS AND SPECIFICATIONS

EXHIBIT "C" STATE & FEDERAL PERMITS

There are numerous environmental laws and regulations that apply to this project and which the contractor should be aware of. Contractor will ensure that all personnel working on the project adhere to and remain in compliance with: The Clean Water Act (CWA); The Clean Air Act (CAA); The Coastal Zone Management Act (CZMA); The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); The Endangered Species Act (ESA); The Fish and Wildlife Coordination Act (FWCA); The National Environmental Policy Act (NEPA); The National Pollution Discharge Elimination System (NPDES); The Toxic Substance Control Act (TSCA); The Marine Mammal Protection Act (MMPA); The Migratory Bird Treaty Act; and other state and federal regulations as may be applicable to this project.

PERMITS AND AUTHORIZATIONS

The Contractor is responsible for obtaining NPDES Stormwater Construction Generic Permit to provide coverage under the National Pollutant Discharge Elimination System (NPDES) Generic Permit for Stormwater Discharges from Construction Activities (CGP) pursuant to Rule 62-621.300(4), F.A.C. The Contractor is advised to contact FDEP's NPDES Stormwater Program at (850) 245-7522 or toll free at (866) 336-6312, to download application information from or http://www.dep.state.fl.us/water/stormwater/npdes/construction1.htm of prior to commencement construction.

The Contractor is responsible for obtaining City of Naples Building Permit. The Contractor is advised to contact _______ at (239)______ for additional information and application forms.

The Contractor shall comply with all requirements under the terms and conditions set out in the following permit(s) and authorization(s) obtained by the City of Naples listed below.

- a. Florida Department of Environmental Protection Permit No. 0157689-003; effective [Pending]; and expires on [Pending].
- b. US Army Corps of Engineers Permit No. 1994-05286; effective [Pending]; and expires on [Pending].

The above permits are currently under consideration by the respective agencies and once issued will be provided to the contractor for review. Contractor will be responsible for adherence to all terms and conditions contained within the respective permits. The City and THA are not liable to provide state and federal permits by any given date, though we anticipate having permits in hand no later than March 2024, so construction can commence prior to Sea Turtle nesting season in May.